

L. REPORTS OF THE SENIOR LINERS' ADVISORS AND CONSULTANTS

Transurban (USA) Inc &

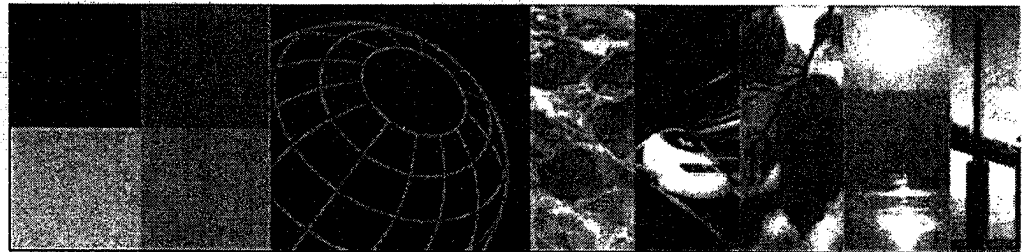
DEPFA Bank plc

Pocahontas Parkway

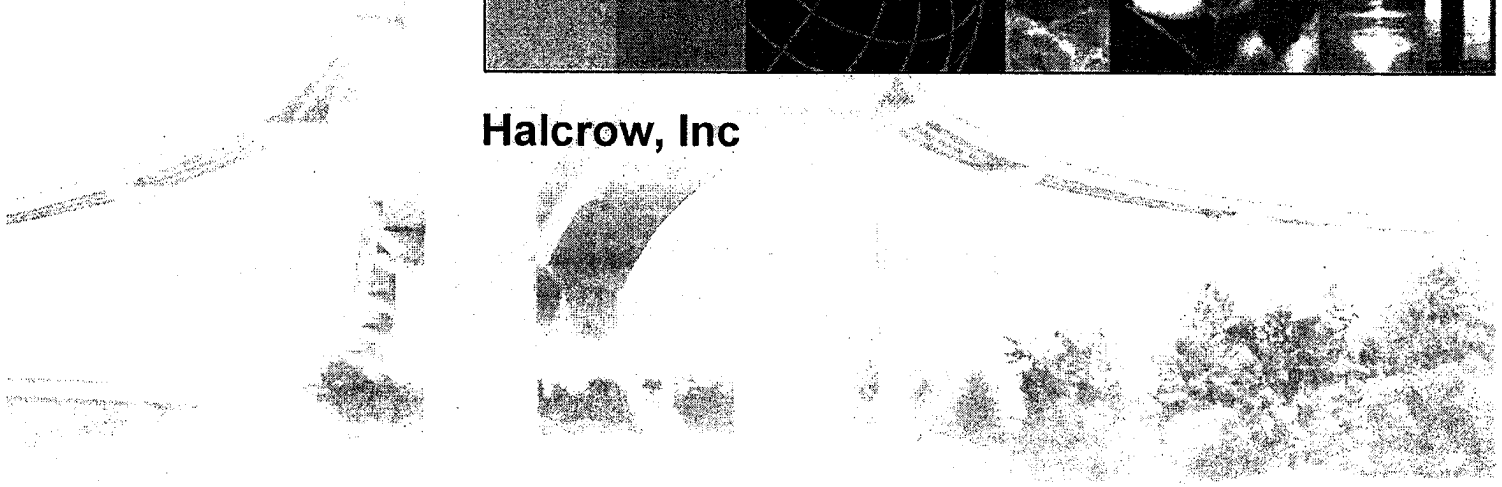
Lenders' Technical Adviser

Final Report

June 2006



Halcrow, Inc



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Appendix A – Scope of Work

Appendix B – Risk Identification

1 Executive summary

1.1 General

Halcrow have reviewed the available information in the Data Room and in the public domain in the light of the Scope of Work. Halcrow have also visually inspected the Asset by drive-pass stopping to review issues raised in the URS Inspection report and other aspects. Halcrow have reviewed the Concession Contract, the O&M Contract, the Asset Management Plan, the Financial Model, environmental impact statements and information on the Richmond Airport Connector (RAC). This has enabled Halcrow to comment generally upon the condition of the Asset, and draw attention to the environmental regulations with which the Parkway must comply.

The Asset was designed and constructed by FD/MK LLC, a joint venture of Fluor Daniel and Morrison Knudsen (now Washington Group International). Both companies have international experience in design and construction of major transportation projects.

Parsons Brinckerhoff were commissioned to design the main bridge and I-95 interchange. Parsons Brinckerhoff are well known and of good international repute. The Asset appears to have been designed to the standards required at the time and no deviations have been disclosed by VDOT.

The constructors of the Asset (FD/MK with Recchi America, McLean Contracting and WC English) are comparatively well known and of good regional repute. No criticism of the constructors has been disclosed by VDOT

The Asset appears to be in reasonable condition for its comparatively young age but is showing some signs of the need for maintenance. Halcrow have found nothing of major concern although there are minor slips and washouts on a number of embankments and cuttings that will need to be repaired and are likely to require continued monitoring and repair in the future. Also there is some dipping in the carriageways at a number of cross culvert locations. This is indicative of subsidence and is probably caused by poor backfilling or leaching of trench fill. Permitting requirements have been met and this is not a significant technical defect to correct and pre-existing contamination of adjacent land emanating from project land is a VDOT risk unless TUSA is negligent. Asset Management Plan (AMP) procedures for monitoring and rectification are required. Previous occurrences have been repaired under the terms of the warranty of the design and build contract and once rectified there should be no long term risk. The collection of highway rubbish on the overpasses and carriageways suggests that routine maintenance has not so far been seen as a priority, but this does not appear to have adversely affected the facility.

The toll equipment is conventional for the US market and appears to be working satisfactorily, albeit not as efficiently as would be expected. The furniture is also conventional and raises no significant risk although it is recognised that Transurban have carried out a review of the system and have identified the need for a major upgrade in 2007.

Currently the Parkway is being used by some 50% of the traffic forecast. Increase in demand to the forecast levels would not pose any significant capacity problems either in terms of mainline or ramp configuration. Should expansion be required in the future the James River Bridge has been constructed to accommodate a three lane cross section on each carriageway and adequate room has been allowed within the right of way to accommodate 3 lanes in each direction including additional toll collection lanes.

Based on the documents reviewed the Parkway appears to be in compliance with existing environmental regulation. The FHWA and EPA re-evaluated the original Final Environmental Impact Statement in 1994 which was then used as the basis for the 1998 design and construction. Legal counsel has stated that the environmental process cannot now be challenged. The mitigation requirements of the wetland permits issued by Virginia Department of Environmental Quality and the US Army Corps of Engineers have been met and the monitoring periods have been completed.

The western end of the James River Bridge and part of the I-95 intersection were constructed in contaminated ground adjacent to the Dupont Spruance facility. Mitigation measures were considered extensively in studies prior to design and construction of the Project Road. Although no record of the construction activity and mitigation measures in this area have been reviewed the contaminated groundwater plume has been stable for a number of years and it appears that the construction activity has not affected it.

Cautionary signs on the land beneath the I-95 interchange indicate the presence of four buried pipelines. The signs indicate that three of the four pipelines carry sulphuric acid, an unspecified weak acid, and petroleum. The operator will need to monitor the condition of these pipes regularly to ensure no damage occurs to the footings of the adjacent structures.

The forecast operating costs and proposals for operation and maintenance of the facility have been reviewed. Due to the nature of the transaction the detailed costing estimates and a detailed asset management plan have not been available to review. However, the information reviewed is consistent with good industry practice and the forecast costs are comparable to similar facilities in the US. The AMP is to be developed over the 6 month handover period and it is recommended that the provisions contained in the plan are independently reviewed before implementation. Transurban (USA) (TUSA) have made commitments to develop the AMP in line with the recommendations made in this report.

1.2**Principal risks**

The principal risks identified during the review and the TUSA proposed mitigations are listed below:

- Premature failure of major structure elements (tendon anchors etc). The proposed TUSA mitigation for catastrophic failure of 2-year inspections by VDOT, 1 year inspections by IE plus a performance guarantee from all MM contractors applies equally to premature failure. TUSA confirm the process will be reflected in the AMP and that maintenance management contractors will not be allowed to undertake any work unless appropriate guarantees, bonding or Letters of Credit are first presented. These requirements will include guarantees for performance that will be detailed in the AMP. Performance guarantees are typical for maintenance management work in Virginia.
- Polluted run-off to watercourses Probability of contamination is remote and risk is acceptable as a mitigation and prevention plan will be developed by T895 and approved by VDOT. They will be incorporated into the AMP. Transurban will be fitting positive drainage to the James River Bridge to mitigate this risk. AMP to contain information of maintenance of siltation ponds. Buried pipes containing acids and petroleum. If monitoring is effective, then probability becomes remote and consequence marginal giving an acceptable risk. This requires the AMP to describe the monitoring regime to ensure leaks do not affect the bridge foundation. TUSA intend to mitigate this risk by passing it on to contractors. Legal Advisers are of the opinion that VDOT have responsibility unless TUSA is negligent, they state that: "The pipe situation would constitute a pre-existing hazmat to the extent there has been leakage in the pipes in non-compliance with environmental laws that has occurred prior to the closing date and has not been exacerbated by the Operator."
- Major accident on the main river bridge or high level interchange with I-95. Having two separate bridges does allow for a possible alternative contraflow system to keep the road open. Insurances required in ARCA cover loss of revenue for up to 1 year. TUSA have considered contingency plan for rapid vehicle recovery and repairs and confirm that the AMP will detail this process along with traffic management to reduce congestion and disruption.

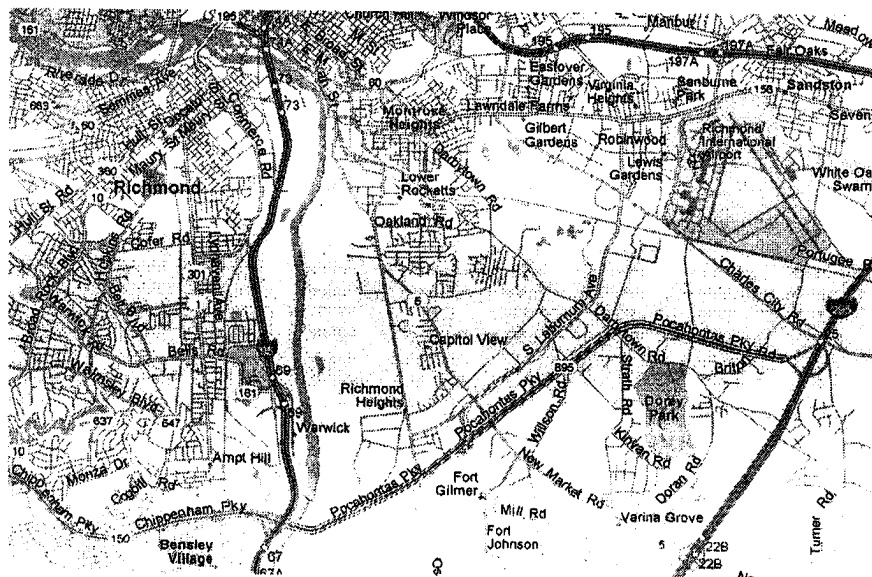
2 Introduction

2.1 Background

Pocahontas Parkway is located approximately seven miles south of the City of Richmond, Virginia. The 8.8-mile Parkway connects I-95 at Chippenham Parkway in Chesterfield County with I-295 in Henrico County near Richmond International Airport. The project was the first ever constructed under Virginia's Public Private Transportation Act of 1995, and was completed in October 2002 with the opening of the ramp from Interstate 295 north to Route 895 west. This final portion of the Parkway was not a part of the original contract and was added in the year 2000; two years after construction began on the Parkway.

The Parkway offers a congestion-free ride and is tolled at \$2.25 at the mainline plaza and \$0.75 at the Laburnum Avenue ramps with Smart Tag users receiving a 25 cent discount, allowing toll payment at highway speeds.

The large bridge on the Pocahontas Parkway, the Vietnam Veterans Memorial Bridge, was opened to traffic in September 2002, and offers the third major James River crossing in the Richmond area. The Parkway is shown on the map below



Transurban (USA) Inc (TUSA) [the Sponsor] and DEPFA Bank plc [the Financial Advisor] have made an unsolicited proposal to Virginia Department of Transport (VDOT) to securitize the Pocahontas Parkway. TUSA has entered a Memorandum of Understanding with the

Pocahontas Parkway Association and Virginia Department of Transportation to hold confidential and exclusive discussions for the purpose of reaching agreement to enter a concession to operate and collect tolls on the Pocahontas Parkway. Transurban will be forming a special purpose vehicle to operate the Parkway; Transurban (895) LLC (T895).

Halcrow are appointed Lenders' Technical Advisor by TUSA to carry out technical due diligence in support of the financing for acquisition of the Pocahontas Parkway. The appointment deliverables are described in the Scope of Work referenced later

2.2 Purpose

This Final Report is prepared in accordance with the Scope of Work to review the current condition of the Asset, to identify key areas of technical risk and assess the Sponsor's plans for maintenance and operation and to review the budgeted costs.

2.3 Scope of Work

The Scope of Work is attached in Annex A.

Information in the Data Room included the original construction contract, and this has been used together with a 'drive by' review in relation to the current condition of the Asset. Other information in the Data Room relates to the financial situation of the Parkway. Whilst this shows a trading deficit we have not considered this aspect in this report as it does not form part of the Scope of Work. A more detailed review of the information in the Data Room is given in Section 3 of this Final Report.

The key documents that define the risks associated with the Operation and Maintenance (O&M) and the status of those documents are:

- Concession Contract (known as the Amended and Restated Comprehensive Agreement or "ARCA"). The final ARCA was not available for review in its entirety at time of writing this report. However, upon recommendation, the sponsor's legal advisers have reviewed the final ARCA and confirmed that the technical risk allocation has not changed from the version reviewed for this report. Extracts of the Compliance Order provisions were provided for review and determined to have not significantly changed the technical risk profile nor has the emotiveness of aspects of the wording considered to have a material impact on the requirement for safety improvements over time..
- O&M Contract – based on existing VDOT maintenance contract but not yet finalized for use on the Parkway. It is recommended that independent review of the O&M Contract be a condition subsequent to financial close and the financial documents include such as a contractual requirement of the financing agreement.

- AMP– Outline plan has been produced but the plan has not been tailored to the specific conditions relating to the Pocahontas Parkway, this is scheduled for the handover period. It is noted that VDOT require this as a component of the ARCA. It is recommended that the legal advisors comment on our suggestion that the final AMP is independently reviewed and subject to amendment and approval of the lenders' under the financing agreement.
- Financial Model – partial details on the build up of the O&M costs

3 Data room information

3.1 Overview

The Data Room, located in the offices of the Pocahontas Parkway Association (PPA) at the mainline toll plaza, contains information provided by VDOT and the PPA. A list of the items held in the data room and other items provided by VDOT or the PPA is given in Annex B.

The Data Room documents are almost exclusively hard-copy with a small number of electronic files available for review.

Of particular interest to the technical due diligence team were:

- the original Design and Build Contract for Route 895 Connector June 3, 1998,
- the annual inspection report; Assessment of maintenance and operations for roadway, drainage and bridges along Route 895, URS, Richmond June 27, 2005
- the under bridge inspections as required by the FHWA
- The invoices to the PPA for VDOT services covering the period July 2004 to June 2005

The original comprehensive agreement to develop and operate Route 895 Connector was not reviewed as a new Amended and Restated Comprehensive Agreement has been negotiated.

The original construction contract and the inspection reports form the basis for the review of the Asset.

Further visits to VDOT archives allowed review of the design submissions for the two construction contracts that formed the 1895 Design and Build contract.

3.2 Specific issues with data Room Documents

A number of pieces of information were not available in the data room and were not subsequently provided by VDOT. However, the review team has satisfied itself that the alternate information supplied along with additional investigations have provided sufficient information upon which to base their findings.

The following table indicates the documents received by the review team and those not available for review and details where alternate information has been used in lieu of requested documents.

Documents	Issue	Status
Maintenance records; including costs, call outs etc.	Understanding existing maintenance burden including actual costs.	See budget and actual costs.
Maintenance plans; including any specific guidance for Pocahontas Parkway	Understanding planned maintenance issues, any large ticket items allowed for; bridge bearings, joints etc..	Understood that there are no maintenance plans in place. Interview with VDOT staff has confirmed the existing regime.
Maintenance budgets (and comparison to actual)	To understand maintenance costs allowed for currently.	Summary of highway maintenance budget and call off supplied by PPA
Traffic accident records	Looking for recurrent accidents, understanding number of call outs and extent of infrastructure damage.	Summary of serious and infrastructure damage accidents supplied by VDOT. Police hold full records and it takes over a year for records to be completed and returned to VDOT.
Copies of warranties and work carried out under warranty. Any outstanding issues.	Understanding any liabilities that would be taken on through any ongoing maintenance issues or concerns	Verbal communication on warranty work and review of final inspection records
Bridge maintenance manual – particularly relating to the pre-stressed box girder, bearings and joints. (Manufacturer's service information)	Understanding the design life and maintenance liability of various components of the bridges.	Not seen by review team. Sponsor will obtain these under the Asset Management Plan
Environmental Impact Statement Final Report	Understanding what commitments and obligations were made. Description of site investigations made (including ground contamination)	EIS for Parkway and for RAC have been received.
NEPA commitments, permits and licenses (in place and outstanding) Including:	Review of permits to assess any outstanding commitments.	Received
Permit drawings	As above	Confirmation received that DEQ and USCoE permit requirements have been met
Design report; detailing design standards, assumptions and loadings	Need to understand what standards, loadings and design assumptions have been allowed for on structures, pavement, drainage etc...	The design drawings contain notes that provide much of this information although not all. D&B contract defines the standards used for design and further assessment has supplemented the notes. Bridge traffic loadings are OK, ship impact risk was found to be negligible and pavement

Documents	Issue	Status
		designs are confirmed OK. Design to standards would cover appropriate wind loadings.
Final construction report;	To confirm details of closing out of construction issues including closing out of any quality issues during construction and any outstanding quality/warranty issues	None produced. Copies of final inspection reports have been seen and construction warranties cover repair of minor faults. D&B contract QA/QC program considered robust with no evidence to suggest there are outstanding quality issues. VDOT to ensure that warranties by the D/B contractor are extended to the Operator
As constructed drawings for the Parkway	To help assess any potential risks from design details	Selected design drawings reviewed. These were submitted in batches as construction progressed. As this was a D&B contract it has been assumed that the drawings represent as-built condition.
Outline design plans for the proposed airport connector	To carry out review of standards, plans and permits.	Received and reviewed

3.3

Other information

The key documents that define the risks associated with the O&M are:

- Concession Contract
- O&M Contract
- Asset Management Plan
- Financial Model

The proposed O&M sub-contract to be used by the Sponsor is based on the recently let VDOT contract for the I-64, Richmond and Hampton Roads Districts, Turnkey Asset Maintenance

Services contract. The terms of the contract have been reviewed and will require only minor modification to be applied to the Pocahontas Parkway with Transurban USA as the client.

An outline of the AMP has been reviewed. The plan sets the framework for a generic asset management plan but is not developed to a stage that accounts for project specific requirements. As VDOT and Transurban propose a transition period (of six months) for the handover of the O&M responsibilities it is understood that Transurban will use this period to audit O&M requirements and develop these requirements. It is recommended that these requirements are submitted to the lenders and independently audited for technical compliance against acceptable industry standards.

The Financial Model contains O&M costs based on a combination of historic costs obtained from the PPA and highway maintenance costs developed for the Sponsor by VMS, a local maintenance contractor. The costs allowed for are discussed in Section 8.3.

4 Asset condition

4.1 Introduction

The Asset was designed and constructed by FD/MK LLC, a joint venture of Fluor Daniel and Morrison Knudsen (now Washington Group International). Both companies have international experience in design and construction of major transportation projects.

Parsons Brinckerhoff were commissioned to design the main bridge and I-95 interchange. Parsons Brinckerhoff well known and of good international repute. The Asset appears to have been designed to the standards required at the time and no deviations have been disclosed by VDOT.

The Parkway was constructed in two parts. FD/MK contracted with the joint venture Recchi America, Inc./McLean Contracting to construct Segment 2 (James River Bridge and bridge ramps), and W C English, Inc. to construct Segments 1, 3 and 4 (Route 895 highway and bridges). W C English has built numerous projects for VDOT in a satisfactory manner and no deviations or criticisms have been disclosed by VDOT

Currently the Parkway is being used by some 50% of the traffic forecast. Increase in demand to the forecast levels would not appear to pose any significant problems but could increase the incidence of carriageway dipping and the need for earlier rectification and some carriageway down time. This is not a material issue. Rectification may be scheduled outside peak hours to minimise the impact on revenue while repair costs should not be significant. The AMP should detail the maintenance inspection regime and procedures.

The Parkway generally provides for a dual roadway with two lanes in each direction, shoulders and a grassed median. The interchange at I-95 consists of high mainline separate bridges providing 145' vertical clearance over the James River and ramp bridges to and from I-95N and to I-95S. The mainline bridges provide for the future third lane in each direction. There is an exit to the north with single lane ramps and associated bridges over the Parkway lanes provided at Laburnum Avenue. The Parkway passes over Cornelius Creek, Darbytown Road and Monahan Road on dual two lane bridges, and several crossing roads are two span bridges over the Parkway

The roadway portions of Pocahontas Parkway are of flexible asphalt construction in cut or fill sections as required by the profile of the road. The shorter span and curved ramp bridges are generally steel stringer design with concrete decks. The Route 895 mainline bridges over I-95 and a few others are segmental concrete box girder bridges.

Quality Assurance was by an independent consultant to FD/MK; Site – Blauvelt Engineers, Inc. VDOT also provided Quality Assurance inspection to verify conformance with VDOT's obligations under the Design Build Contract.

The main toll plaza is located about 1 mile east of the river crossing with the Laburnum Avenue ramps about 1.5 miles further east. A user of the road pays a toll once either on the main line or at the Laburnum Avenue ramps (On going east or off going west).

At the main plaza there are 2 open ETC lanes with non-stop tolling and 3 toll booths in each direction. The toll booths allow manual collection and Smart Tag reading but no automatic cash collection. The ramps at Laburnum Avenue are not manned and allow ETC or automatic cash collection.

The open ETC lanes can be used by all classes of vehicles as can the booths. The ETC is compatible with EZPass and VDOT are members of the IAG and will be setting up a toll clearing house to manage all Smart Tag and EZpass transactions.

4.2 Standards

The June 2, 1998 "PROJECT SCOPE -895" shows approximately thirty AASHTO (American Association of State Highway and Transportation Officials) and VDOT standards, guides, specifications, manuals and other design requirements for the project. The AASHTO Geometric Design of Highways and Streets, VDOT Road Design Manual and FHWA Manual on Uniform Traffic Control Devices are the main references for the roadway alignments and design. The AASHTO Standard Specifications for Highway Bridges, LRFD (Load and Resistance Factor Design) Design Specifications, Guide Specifications for Horizontally Curved Bridges and Guide Specifications for Design and Construction of Segmental Concrete Bridges are the main references for bridge design.

Further review of the bridge plans indicate the bridges were designed for an MS 18 loading per the AASHTO Standard Specifications for Highway Bridges, Sixteenth Edition and Interims.

These are appropriate specifications for the design and construction.

4.3 Comments on URS Report

URS Corporation prepared a report, ASSESSMENT OF MAINTENANCE AND OPERATIONS FOR ROADWAY, DRAINAGE & BRIDGES ALONG ROUTE 895 dated June 27, 2005.

Included in the report as an Appendix, are copies of the FHWA (Federal Highway Administration) required biennial bridge inspections carried out using a snoopers for under-bridge access. These were provided by VDOT and performed by CLARK-NEXSON Architecture & Engineering in April 2004 and September 2004

The assessment by URS was limited to items visible from the roadway surface; i.e., no under deck inspection of bridges was included. The biennial bridge inspection reports from 2004 include under-bridge inspections. The roadway items noted from this inspection are mostly minor maintenance items. The bridge items noted include blocked scuppers and partially silted expansion joints which are minor maintenance items. URS noted the cracking and some apparent sealing of some of the cracks in the latex modified concrete overlay on the various bridge decks. This cracking was an issue addressed in warranty between VDOT and FD/MK.

The biennial structure inspection reports generally show FHWA condition ratings of 7 or 8 indicating generally almost new condition. Scores range from 0 (failed) to 9 (excellent condition) with 4 assessed as poor condition. These reports also noted the cracking in the latex modified concrete overlay on the bridge decks. Some cracking was also noted on the substructure pedestals at some bearings. These will need to be monitored during future under deck inspections to determine the need for remedial repair options if any are required for structural integrity. The inspections for the several box girders in the I-95 interchange note the presence of pigeon droppings on pier caps and in some of the boxes due to unscreened vent openings and missing grates at access locations. The recommendations in the inspection report include cleaning the pigeon debris, placing screens over unsecured vent holes; replacing hatch covers where left open and evaluating security for access to the hatches.

4.4

Inspection(s)

Inspections carried out were a partial drive through of the Parkway with VDOT's Assistant Resident Engineer for the Richmond District Toll Facilities and a walk through of the tunnel from the toll booths to the adjoining building on July 19, 2005. The tunnel was clean and dry with some minor vertical hairline cracks and a small horizontal hairline crack. These were also noted in the URS report. The VDOT Assistant Resident Engineer confirmed that he checks the tunnel and cracks on a regular basis and that there is no apparent growth in the cracks. It is our opinion that the cracks are minor and are normal for this type of structure.

Two locations in the roadway were noted as having dips in the pavement just west and east of the toll plaza. There are warning signs posted at both locations. The asphalt concrete pavement has been sealed along the longitudinal joint between pavement lane placement and other random lengths. The former silt basins for erosion control now act as storm water detention basins and have varying amount of vegetative growth.. It was noted that the basins have only a minimal amount of water contained during and after a storm event. A bridge was recently constructed over the Parkway at Britton Road and there are some minor erosion rills on the approach slopes.

Inspection at a number of locations highlighted in the URS report revealed some washout and minor slippage to both cutting and embankment slopes. This would appear to be due to the lack of topsoil in the finishing of the earthworks which has hindered the establishment of vegetation

to the slopes allowing water to penetrate the soil and cause shallow slips. While not a major threat to the road there could be implications to the maintenance budget if this continues. The AMP should include measures to re-establish vegetation growth and prevent further erosion.

There is some rust staining on the piers to ramps on the I-95 interchange but these appear to be a result of the construction process and are not considered to be a problem. The piers also show scuff marks that are probably due to the operation of the slip form shuttering and although unsightly are not a maintenance issue. Repairs to apparent honeycombing of the piers have been carried out in a number of locations. This is not necessarily a major issue but the maintenance regime should include monitoring of these repairs to ensure early intervention should they show signs of deterioration.

Additional drives-through of the Parkway on July 26th, 27th and 28th noted the following minor issues:

- There is a dip at the west end approach slab on the east bound Route 895 ramp bridge to I-295N.
- There is a dip at the west end approach slab on the east bound Route 895 Bridge over Darbyville Road.
- There is rock stabilization at the base (toe) of the slope on the north side of the west bound lane of Rt. 895 before the toll plaza.
- The Ramp from Route 895 west bound to I-95 north bound has a significantly reduced speed limit of 20 mph
- Accumulated debris and rubbish on lane-side

A number of these matters could have impact on the safety of the Parkway. Although there is no evidence to suggest that any accidents have been attributable to these issues to date, we suggest that the Operator will need to address these matters as part of the O&M.

4.5

Comments on design

The review team has not seen the design reports or calculations. However, the contents of the preliminary engineering submittals made by FD/MK have been evaluated and selected drawings have been reviewed. The preliminary engineering plans for the roadway and bridges were presented for review by VDOT in 117 separate submittals over the course of construction. The review confirms that the roadway and structures have been designed to standards that are appropriate for the predicted traffic and environmental loadings. The study raised no significant

issues that represent a risk to the concessionaire apart from those below which are mitigated as described,

- The review team raised the concern that the service life of bridge bearings on the high level interchange and access for replacement was apparently not assessed and could represent a significant cost if replacement is needed ahead of the estimated 40-50 years. Subsequently TUSA has advised that the forecast linear major maintenance spend is intended to allow for uncertainty in such a forecast, for example the risk of early bearing replacement, and that "access" by snoopers has been budgeted in the cost of bridge bearing replacement.
- The review team noted a reduced design speed for the ramp from Route 895 westbound to I-95 northbound that is below the lower limit of acceptable design parameters. It is suggested that mitigation of the risk through warning signs will help to reduce vehicle speeds ahead of the bend. TUSA will consider this in consultation with VDOT.
- The I-95 interchange is built over an area of groundwater contamination and there is a slight residual risk of contamination of groundwater from pile insertion (dealt with under environmental concerns). Monitoring reports suggest no contamination has occurred and VDOT has indemnified TUSA for pre-existing environmental conditions.

Expansion

Traffic forecasts suggest that additional lanes will not be required within the concession period although the review of construction drawings and design report confirms that there is sufficient space within the right of way to allow for this. If required expansion of the road capacity will take place with the addition of lanes in the central reserve. The James River Bridge has been constructed to accommodate three lanes in each direction but is currently line marked for only two lanes. Accordingly, any expansion of mainline capacity does not require an upgrade of the high level bridge.

The several bridges over crossing roads and a creek are separate structures for each roadway. Expansion for a future additional lane will require the expansion of each of the bridges on the median side for the additional lane. Expansion of the EBL of Route 895 over Monahan Road will be required for the future construction of Ramp B of the Airport Connector. The RAC design has made allowances for this expansion.

The highway as constructed allows for the addition of one electronically tolled lane and an extra toll booth in each direction.

4.6 Record of accidents

The review team has seen the record of accidents affecting the project road kept by VDOT. This does not represent the official record which is kept by the police but should highlight any major accidents. The record showed a similar number of accidents as described by VDOT maintenance staff in interview. It appears that there have been only 2-3 injury accidents and no fatalities since the road opened. One of the accidents noted verbally involved an impact attenuator although it was not noted if the attenuator was at the toll plaza.

A number of guardrail strikes were noted in a drive-through of the road. . Although minor guardrail damage is not a significant cost issue, these accidents are difficult to track and are often unreported and allowance should be made for regular repairs to guardrail in the O&M costs. The AMP will detail the cost recovery process from a delinquent road user's insurance to maximise cost recovery.

4.7 Comments on quality control

Oversight arrangements

The arrangements for construction oversight are defined in the original construction contract, which was procured by Design Build. The contract calls for an independent Quality Assurance (QA) manager with additional oversight provided by VDOT, via the Corps of Engineers.

The independent QA role was carried out by Site Blauvelt. Site Blauvelt had previously been appointed as VDOT's designer prior to FD/MK's Design and Build proposal. Site Blauvelt is a well established engineering company with a track record of providing construction inspection services on transportation projects and a speciality in pre-stressed concrete.

Comments on construction records

We have seen copies of the last 3 quarterly reports detailing the quality issues that were raised during the latter part of the construction. We have also seen final inspection reports by VDOT engineers relating to guardrails and electrical installations which indicate that all issues raised were corrected before handover. The Final Inspection Report for the Route 895 Bridge Ramps and Route 895 Box Girders indicate that corrections were made and approved by VDOT.

It appears that the QA procedures have been followed and the non-conformances closed out to the satisfaction of the QA Manager, therefore none of the issues raised in the Quarterly Reports appear to generate any significant risk in the operation and maintenance of the facility.

4.8 Defects warranties

Specific warranties for the design build have not been seen, although the design build contract indicates that in general the Asset was warrantied for 5 years with an additional 1 year for repairs made under warranty. General warranties under the D&B contract will be transferred. There is no material risk but there is opportunity for cost saving for defect rectification as some

manufacturers warranties might have longer terms than general warranties. It is suggested that TUSA investigate availability of warranties for bearings, joints, lamp columns etc.

In conversation with the VDOT Sandston Residency, warranty repairs have been requested and carried out for:

- the dips in the roadway associated with lack of compaction at cross culverts (mentioned previously),
- the light fixtures on the I-95 intersection bridges, in which the lanterns were shaken loose, and
- the latex modified concrete overlay which has shown signs of early cracking.

Latent defects review

The road is newly built and the handover inspection at the end of the construction period appears to have been carried out methodically by appropriately qualified VDOT staff. Any obvious defects have been identified and corrected under the defects warranties. In general this represents a low level of risk of latent defects.

The cracking in the overlay is the most significant issue dealt with under warranty with a possible reduced useful life before the need for replacement.

Two other potential latent defects that were visible on the inspection of the facility are; the recently repaired cold joints in the asphaltic concrete surfacing and the repairs made to various earthworks slopes. Neither of the defects represents a significant risk but should be monitored during operational inspections.

There are a number of low probability but potentially significant defects that should be allowed for in contingency planning and in insurance considerations such as defects that might lead to the need for early replacement of pre-stressing tendons in the James River Bridge, early replacement of high level bearing assemblies or similar activities. TUSA have given assurances that all appropriate insurance coverage will be obtained and are readily available in the market. Additionally, the AMP will include the process for monitoring and inspection to allow early detection of potential problems; federal bridge inspection requirements will apply and the Independent Engineer will carry out annual inspections. VDOT are named as insurer of last resort for Force Majeure...

Outstanding contractual obligations

TUSA's legal advisers, Orrick, Herrington & Sutcliffe LLP, have carried out a review of the contracts pertaining to the operation of the Parkway. The only outstanding issue highlighted is

the transfer of grant of license to VDOT to use source codes for proprietary computer software for the operation of the ETTM system ("Source Code") and the associated Escrow agreement. TUSA have subsequently confirmed that access to source codes are included in Section 18.05 of the ARCA..

4.9 Third party agreements and utilities

We are not aware of any significant issues relating to third party agreements and utilities over and above the standard requirements to liaise with adjacent authorities and emergency services.

4.10 Condition risks

Geotechnical Risks

The project road is located in the geological feature known as the Virginia coastal plain. The Virginia Coastal Plain is underlain by a wedge of sediments comprising late Jurassic and Cretaceous clay, sand, and gravel with sequence of thin fossiliferous marine sands of Tertiary age overlying the older strata.

Although there has been historic mining in the Richmond area the mines were located to the west of Richmond in the Richmond Basin and not within the coastal sediments. There are a number of sand and gravel pits in the general location of the road but no active or historic underground mines on record with the Department of Mines. None of the gravel pits would affect the project road. Discussions with the Department of Mines, Minerals and Energy confirmed that the risk of subsidence along the project road is negligible.

There is a borrow pit located in the South West quadrant of the I-895/I-295 interchange where sands and gravels have been excavated. The pit is flooded and appears to be inactive. The pit is not on record with the Department of Mines but it does not appear to represent a significant risk to the project road.

The Richmond area carries a moderate earthquake risk, there have been 18 earthquakes rated at 4-4.5 or higher on the Richter scale in Virginia since 1774 with one quake at 5.8. The Central Virginia Seismic Zone is just west of Richmond and is the source of many of Virginia's earthquakes. However, earthquakes less than 5 on the Richter scale are unlikely to cause any damage to the facility. There is a slight risk that quakes over 5 could cause slippage of embankments and cut slopes with the possibility of affecting trafficked lanes and the AMP should address contingency planning for this event. The structures appear to have been designed to easily accommodate such earthquakes.

Pavement

The design calculations for the pavement structure were not available for review but a review of the pavement construction details shows the asphalt concrete pavement structure is typical for a

facility of this type. Subgrade materials are very variable along the route and look to be of variable quality, however, VDOT engineers confirmed that poor soils were removed and replaced with suitable material during construction. The design thickness of bituminous layers, the low volume of traffic compared to original estimates and the low percentage of commercial vehicles suggests that structural problems with the pavement will be unlikely.

Structures

Design reports are not available for review, but plans of the bridges are available. The structure types, design and materials are normal for the type of facility. The mainline high level dual bridges on Route 895 over I-95 have the space for the future third lane in each direction along with the auxiliary lanes for the on and off ramps. There is provision on the east bound bridge for the future connection of Ramp F from I-95 S to Route 895 E.

The several overhead bridges crossing Route 895 are normal steel stringer or pre-stressed concrete girder design. The centre pier location should be adequate for the future lane addition on the median side of the road.

The several bridges over crossing roads and a creek are separate dual structures. Expansion for a future additional lane will require the expansion of the bridges on the median side for the additional lane. Expansion of the EBL of Route 895 over Monahan Road will be required for the future construction of Ramp B of the Airport Connector.

The drainage of the decks to the concrete box girder bridges is effected by drainage outlets through the deck directly to the ground below and also to the river. This represents a pollution risk from highway run off particularly if any spillage occurs. The environmental permits do not address this issue but there is a risk that the operator could be held responsible should a spillage on the bridge cause pollution to the James River. The risk will be mitigated by installing a positive drainage system to the James River Bridge and TUSA have indicated that this will be carried out. There is still a risk that freezing of the pipe work in low temperatures would cause temporary drainage problems on the deck but this can also be mitigated by diligently removing snow from the carriageway before any subsequent thaw. The use of magnesium chloride as a de-icing material on the bridge reduces the risk of pollution from run-off following de-icing operations. The AMP should describe measures to maintain the deck drainage.

Drainage

Drainage generally consists of open ditches running longitudinally in the central reserve and along the outside shoulders with concrete pipe drainage at high level on embankments. Longitudinal drainage is connected by concrete piped cross culverts and outfalls through silt basins. The drainage is of a standard design and appears sufficient to cope with major storm events. VDOT maintenance employees report no issues with drainage during heavy rainfall

events. There has been little or no maintenance of the silt basins to date and a number of them show signs of significant build up. The O&M plan should allow for the upkeep of the basins.

Drainage from the I 95 interchange structures is generally direct through the deck to the ground below. Drainage holes are omitted where water would fall on a road below the bridge, however, as noted above, storm water drainage from the main James River bridge falls directly to the river and could represent a risk of pollution should a spillage occur on the bridge or during prolonged cold spells when large amounts of de-icer are used. TUSA have confirmed that they have plans to mitigate this risk through the provision of a positive drainage system to the bridge deck.

Tolling

The toll collection equipment and violation enforcement system has been supplied by InTrans, a well established supplier and subsidiary of the French CS Group. Intrans are supplying maintenance support to VDOT through a maintenance contract that runs for one year from 20 May 2005 and is renewable for three successive one year periods. It is understood this contract will be novated to the Project Sponsor. The toll collection system is only a few years old and seems to be consistent with current US technology, certainly at the roadside. The impression from the information and inspections so far is that the toll collection system is being adequately operated and maintained, generally VDOT appear satisfied with the operation.

In their assessment of the ETC system for upgrade, however, Transurban have uncovered a number of operational problems with the system ranging from the four different operating systems on the 13 lane controllers, functional disconnects between the ETC system and the VES and operational problems associated with systems integration. Consequently, Transurban are planning to replace and upgrade the current system over the first few years following acquisition.

VDOT are members of the IAG and will be setting up a toll clearing house to manage all Smart Tag and EZpass transactions from Virginia toll roads. This clearing house will handle all ETC tag distribution, customer accounts and payments and so the Sponsor will not need to provide such facilities himself. An agreement has been drawn up between VDOT and the PPA under which PPA is to receive the aggregate tolls and any membership fees on the next succeeding business day minus a transaction fee. This fee is reviewable annually and based on VDOT's costs in managing the clearing house the previous year and is currently estimated by VDOT to be 8 cents for each transaction in FY06. The VDOT clearing house deals with all transactions with IAG. VDOT may appoint an ETC Servicer to carry out this role on its behalf, but VDOT will be wholly responsible for the provision of the service to PPA. The agreement addresses such issues as:

- recompense for loss of revenue for PPA if VDOT fails to provide the service;

- reconciliation of accounts; and
- future upgrades by either party.

TUSA legal advisors have confirmed that the clearinghouse arrangements appear acceptable. This agreement is renewable annually.

There are minor issues with the axle counting 'treadles' set in the manual toll booths. The treadles work loose and have required replacement at regular intervals, but the work required to replace the treadles is minor and these are not significant cost issues.

Toll collection and enforcement

InTrans toll collection system has been provided as an integrated package including equipment for manual toll collection, coin machines and ETC. The open road ETC lanes use a gantry-mounted laser-based vehicle classification system. Toll collection is supported by a central computer system for real time system monitoring, on-line maintenance and transaction recording and reconciliation, auditing and accounting.

For the open road ETC, there is a violation enforcement system using the laser vehicle detection linked to number plate recognition cameras and axle counting treadles. Currently the system does not check license plates against transponder details, this is carried out manually and non-matches are assessed to decide on whether to proceed with enforcement through the local police force. Future upgrades should enable automatic checking of transponder details. There are a number of exempted vehicles; VDOT, police and emergency services and the like. These should use a Smart Tag or sign in through the manual lanes.

An analysis of figures supplied for violations indicates that, for 2005, there was an average violation rate and leakage rate of around 2.5% with 3.5% on the express lanes, 0.5.% on the mainline toll booths and over 20% on the Laburnam Avenue ramps. Given that traffic flows are very low on these ramps (<500 vehicles/day), this last constitutes no greater overall loss than that on the express lanes, but there may be a benefit in an investigation into measures to reduce or eliminate it.

We anticipate that the AMP will cover these aspects

Capacity

It is likely that the existing toll arrangements will provide sufficient capacity to handle the expected growth over the concession period. The current mix of manual/automatic and ETC lanes is adequate for the projected traffic and the space allowed for an additional freeflow lane and toll booth in each direction should provide the necessary flexibility based on projected traffic.

We anticipate that the AMP will also cover these aspects

Lighting

Plans and design reports not available for review, but in the PROJECT SCOPE 895, roadway lighting was to be in accordance with FHWA Roadway Lighting Handbook. Lighting is confined to the I-95 interchange bridges and toll plaza. The notes on handover of electrical installations including lighting columns show that minor issues picked up in the construction inspection regime have been dealt with.

The metal light poles appear to be standard design which should be available for replacement due to accidents or other damage.

Guardrails

Plans and design reports not available for review, but the standard "W" beam guardrails with standard end conditions are in place along hazard areas such as the silt basins and on high embankments. The approaches to the bridges are defended with concrete barrier rails and standard tapered transition guardrails. The guardrail in several locations shows evidence of being struck by vehicle tires and has performed properly in redirecting the vehicle from the hazard.

The notes on the location and installation of guardrails available in the data room show that the location of the guardrails meets VDOT requirements and that minor issues picked up in the construction inspection regime have been dealt with.

Safety

From a review of the preliminary engineering plans the geometry of the road meets VDOT standards in all but one instance and standard impact attenuators are in place in front of the toll booths and at the gore areas at exit and entrance ramps. This is in line with standard practice and helps mitigate the consequence of impact.

The Ramp from Route 895 west bound to I-95 north bound has a significantly reduced speed limit of 20 mph with no prior warning to road users. This is a potential safety hazard as vehicles will have a short time to adjust speed when leaving the mainline leading to heavy braking and possible shunting accidents. It is suggested that mitigation of the risk through warning signs will help to reduce vehicle speeds ahead of the bend.

The high level bridge and interchange exposes high sided vehicles to high winds. However, discussions with VDOT maintenance staff revealed that although warnings had been posted on a number of occasions the bridge has not yet been closed to traffic due to high winds. The area is susceptible to storm events, the remnants of a number of hurricanes have affected the area in

the last decade, and the operator will need to include contingency plans in the AMP to deal with closure of the bridge.

Roadway Utilities

There are no utilities running along the project road within the right of way. Standard electricity and telephone crossings occur at the crossroads and there is an 18" buried gas line owned by Virginia Power crossing the road at Station 219 near Wilson Road. None of these utilities represents a significant risk to the facility.

There are a number of pipelines containing petroleum and mild acid running beneath the I-95 interchange. The risks associated with these pipelines are discussed in Section 7.3.

Toll Facility Utilities

A back up generator is available in the event of a power outage.

Project office & tunnels

Inspection of the project office and tunnels revealed no specific problems. The tunnel is clean and dry apart from a minor leak around a pipe flange at the northern end. Slight cracking in the tunnel walls does not appear to be structural and is not expected to deteriorate significantly. It is our opinion that the cracks are minor and are not unexpected for this type of structure. There is ample capacity within the tunnel to accommodate additional cabling and power supply.

Interchanges

The interchange structures are a mix of segmental pre-cast pre-stressed concrete box girder construction and standard steel girder composite concrete deck construction. Neither construction method represents any risk over and above standard risks. The condition of the interchanges appears to be good from the site inspection and the bridge inspection reports do not reveal any obvious defects.

Separation Barriers

The bulk of the route uses a wide central reserve with swale drain to effect separation between the eastbound and westbound carriageways. The central reserve is of standard design and construction.

Parapets

The I-95 interchange and the James River Bridge drawings show standard 32" concrete crash barriers acting as parapets. These parapets are a standard detail on similar structures in the US. The FHWA website states that a single-unit truck is contained in crash tests for concrete barriers with a minimum height of 815 mm (32 in). To contain and redirect an "18-wheeler" or tractor-trailer in a crash test, a concrete barrier must have a minimum height of 1070 mm (42

in). The barriers on the interchange and main bridge are 810mm high and therefore cannot be relied on to contain larger trucks in a collision with the parapet.

Given the height of the River Bridge and Interchange the consequences of a truck toppling of the parapet are severe. However, the level of heavy trucks using the I895 is relatively low and as the road is designed to recent geometric standards there is consequently a relatively low probability of a truck hitting the parapet and overturning. In mitigation, the contingency planning and insurance coverage should reflect the possibility of an overturning accident.

Road markings & signage

The road markings and signage are generally appropriate for the road. We recommend that a new sign giving advanced warning of a lower than expected exit speed on Ramp F of the I-895 Interchange should be installed to reduce the risk of accidents on this high level structure.

Operating systems (cameras, etc)

TUSA have reviewed the existing toll collection and violation enforcement systems and have planned for a full replacement and upgrade within the first three years. We have not seen details of the proposals and cannot comment on specifics. However, we recognise that Transurban have experience in and installing and operating electronic tolling systems and that they recognise the needs and risks inherent in purchasing, installing and operating such systems.

Required capital improvements.

The Airport Connector is discussed elsewhere. Apart from the scheduled upgrade of the toll collection equipment and a proposed interchange with Wilton Farm Road there are no other capital improvements that are necessary to operate the road efficiently. The Developer responsible for the housing at Wilton Farm will pay for the access to the project Road and will need to coordinate with T895 to schedule the works and agree reasonable lane closures.

5 Concession structure,

5.1 Concession Contract

General

The final version of the Concession Contract (known as the Amended and Restated Comprehensive Agreement or "ARCA") was not available for review in its entirety at time of writing this report as it was the subject of confidential negotiation. An original review of the ARCA dated October 12, 2005 was carried out and updated using the version of the ARCA dated March 3, 2006,

References below refer to this review. However, upon recommendation, the sponsor's legal advisers have reviewed the final ARCA and confirmed that the technical risk allocation has not changed from the version reviewed for this report.

However, extracts of the Compliance Order provisions were provided for assessment of the impact of additional obligations to allow contingent financing for future safety improvements over time. Although the emotiveness of aspects of the text refer to the obligation being "without condition or qualification", there is no evidence to suggest that this is not unexpected. The provisions are determined to have not significantly impacted the technical risk profile as long as changes to safety requirements are not discriminatory and are applied State wide. The magnitude of the safety improvements will therefore be mitigated by the cost impact on the State with VDOT requiring TUSA to allow for this contingency within the Extraordinary Maintenance and Repair Reserve.

The reviewed version of the ARCA comprises a main body Agreement and listing for eleven Exhibits of which nine are used, as listed below:

- Exhibit A: Definitions
- Exhibit B: Project Description (Not seen)
- Exhibit C: (Reserved) (Not seen)
- Exhibit D: Form of Technical Support Agreement
- Exhibit E: Form of Memorandum and Assignment (Not seen)
- Exhibit F: Toll Rates

- Exhibit G: (Reserved) (Not used)
- Exhibit H: Operation and Maintenance Requirements and Extraordinary Maintenance and Repair Work
- Exhibit I: Consent to Assignment (Not seen)
- Exhibit J: List of Initial Project Financing Agreements (Not seen)
- Exhibit K: Life Cycle Maintenance Model (Not seen)
- Exhibit L: Richmond Airport Connector General Details (not seen)

It is likely that full exhibits will be available with the executed ARCA and this should be checked.

We have divided this Section of the Report into Article sub-sections for ease of reference

Articles 1 to 3: Recitals and Formation

The main body of the Agreement includes the expected legal glue and being based on the Original Comprehensive Agreement also includes the basis for creating a public-private transaction and of course acknowledges that the facilities already exist. The facilities being described as an approximately nine mile, four lane, limited access toll way located from the then eastern terminus of Chippenham Parkway (State Route 150) at I-95 to a connection with I-295 southeast of Richmond International Airport primarily in the south eastern portion of Henrico County (but extending for a short distance into the eastern tip of Chesterfield County and including a small portion in the City of Richmond), including a new high-level bridge crossing Route I-95 and the James River south of the Port of Richmond's Deepwater Terminal. The facilities and the operation termed the Project. The Airport Connector Road (ACR) whilst referred to later is not in the description.

The Agreement confirms the opening for public use as September 2002 by the Pocahontas Parkway (the Association) and further confirms that on October 21, 2004, the Association and the Department (VDOT) received a proposal from Transurban (USA), Inc. and DEPFA Bank, plc with respect to the proposed acquisition by TUSA of the rights and obligations of the Association to manage, operate, maintain and collect tolls. This was followed on June 15, 2005 by a tri-party letter agreement setting forth certain terms and conditions for negotiation of the proposed acquisition by assignment of all of the Association's rights and obligations in connection with the Project, including its rights and obligations under the Original Comprehensive Agreement. TUSA has subsequently set up a special purpose vehicle (SPV) Transurban (895), LLC (T895) to defease the PPA bonds and to operate the Parkway. Therefore, the T895 acquisition payment

will be used by the Association to clear bonds and debt to allow T895 to refinance. Ownership of land does not transfer so financing is exclusively on the basis of the ARCA

Article 4: Tolling

The ARCA does not refer to the SPV as such. The SPV will be the Operator (Transurban (895) LLC) under the ARCA. Reference throughout the rest of Section 5.1 of this Report is to the Operator. Similarly VDOT is referenced as the Department.

The Operator has the exclusive right to fix, to charge and collect tolls [within annual prescribed caps, and excluding bona fide on duty emergency and military vehicles] and other prescribed user fees for the use of the Project from and after the [Contract] Closing Date and until expiry or earlier termination of the Term.

Exhibit F: Toll Rates

This exhibit, updated in the March 3 redraft of the ARCA covers the setting of Tolls, which are prescribed as maximum Tolls, by axle, for three two-year periods (2006/2007, 2008/2010, and 2011/2012) and four one-year periods (2013, 2014, 2015, and 2016) with CPI indexation relief.

The current proposal allows quarterly increase of Tolls from 1st January 2017 by the greater of CPI, real GDP per capita, or 2.8%. The possibility of the proposed escalation formula producing a reduction is controlled by a minimum rate of 2.8 percent post 2016. There are provisions for other adjustments with Department agreement, and comfortably, relief for increases necessary to cover debt service (in Article 4). TUSA can also implement time-of-day variable rate tolling or congestion-relating tolling. The exhibit is workable, with the usual proviso that the Toll levels are/must be supported by the Financial Model

The Operator has the right to continue using the existing electronic tolling system and tolling facilities in place as of the Closing Date or implement a different system for the collection of tolls and/or construct or relocate and maintain different or additional tolling facilities (including the ACR). The Operator income relies totally on revenue. The revenue is ring-fenced exclusively to the Project and before any distribution is further ring-fenced prior to discharge of operating expenses, debt, taxes and the Department, as would be expected to safeguard the service

The Department is responsible for enforcement and thus an obvious comfort to the Operator; as is the relief mechanism to toll capping if the Operator's DCR is breached; subject of course to constraints. Toll suspension in emergencies is also now compensated after an initial five day period

There are warranties from the constructors of the Facility. The ARCA intent is to transfer the benefits of these to the Operator. However this requires the issuer of such warranties to formally

consent. TUSA can expect to obtain consent of the Design Builder as this is a requirement under the DBC.

Apart from the ACR land acquisition matter, where the cost of the Airport Connector construction and land acquisition is capped at \$45.2m and only goes ahead as TUSA's project if TIFIA funding is available, there are no surprises in this first part of the ARCA. The key point is that the whole enterprise is based on collected toll revenue for which the Operator is on risk, as it is for the supply side.

Ownership

Land and Asset ownership is with the Department throughout; including the ACR if and when, and any other Project Enhancements that might be enacted.

Article 5: Revenue Sharing

This Article demands particular attention. The Department takes a potential double bite at top-slicing the net cash-flow generation. The two bites are Initial Targeted Return; the Department gets 50% of the net, and Second Targeted Return where the Department get 90% of the net. These slice levels appear quite generous to the Department on the face of it, but obviously it depends upon the anticipated net cash flow generation predicted in the Financial Model. The Returns are geared to a Base Case IRR of 6.5%; and a Secondary Base Case of 8.5%. This means that the maximum IRR for the Operator is 8.35%. However it does establish the Financial Model as a contract document which is fundamental when it comes to Compensation, Damages and Debt Service relief.

Under the reviewed ARCA the Operator is liable for Budget Shortfalls, which trigger support by a 110% letter of credit.

Article 6: Financing; Lender Rights and Remedies

This is another key Article demanding close attention, which sets out to ensure there is no way in which the Department can, or could be made liable. There are financing conditions which if breached could lead to forfeiture of some lender rights. Fortunately there is included a relief mechanism obliging the Department to give notice of condition breach. Nonetheless it is imperative that the lender maintains its step-in rights if it is to be properly armed to protect its position. It is also comforting to note that the Department share in refinancing gain has been deleted. Probably resulting from the many changes during the development of this Article the text has become a little indigestible. We are not financial advisers and recommend that the Operator looks closely at Article 6 to satisfy itself that the constraints do not compromise workability.

Article 7: ACR Construction

The design and construct obligations originally appeared quite onerous in relation to land, rights of way and utilities, but these risks are here transferred to the Department. The ACR does not appear to impose any particularly abnormal risks, other than the generic risks involved with design and construction.

Article 8: Project Management

This Article covers various operational matters, not only the Operator obligations and ability to subcontract but also the creation of an Extraordinary Maintenance and Repair Reserve (EMRR) (sinking fund); or a letter of credit alternative. The Operator supports Ordinary O&M with project revenues. If at any time that a Budget Shortfall (calculated as the greater of the shortfall between the SPV's ordinary O&M costs for the past or forthcoming year minus revenues for the same period) occurs or is projected to occur for the following year, the Operator is required to deliver to the Department a Letter of Credit in an amount equal to 110% of the Budget Shortfall. The EMRR is based upon a 5 year forecast assessment, topped-up on a rolling 3 year actual expenditure. The ARCA defines Extraordinary Maintenance and Repair Work as, "...maintenance, repair, renewal, reconstruction or replacement of any portion or component of the Project of a type which is not normally included as an annually recurring cost in the Operator's roadway maintenance and repair budgets..." This is actually planned major maintenance. The Reserve will be 110% of forecast, funded up front in each 5 year period, adjusted by actual expenditure as work proceeds..

The Operator is obliged to provide an Annual [revenue/expenditure] Budget to the Department, which of necessity will include the annual impact of the EMRR. As the Assets are comparatively new the impact should be small. No purpose for the Annual Budget is included so it may be harmless in any case; but as the Financial Model will be underscoring the process it will throw up any divergence, for good or bad. It will be a management task to address any such divergence. No doubt the Operator will be judicious in compiling the Budget and the EMRR; and the financier conscious of this in reviewing the product of the process

During a six month Transition Period the Department will be a subcontractor to the Operator for O&M, but with the Operator carrying liability. This seems to be further dealt with in Exhibit G (Not seen)

Article 9: ACR, Enhancements, Change Orders and Compliance

The ACR is defined as a 1.58 miles of four-lane highway from the Richmond International Airport to Pocahontas.

In Article 4 the responsibility for acquiring the land for the ACR is with the Department, but any such land acquired on or after 1st January 2006 is at the cost of the Operator up to US\$ 4.5 million. If the ACR is developed by the Operator it will be under the terms of a Development

Agreement to be agreed; so there should be scope for improving the Operator position if judiciously negotiated.

The ACR is an Operator responsibility if funding becomes available from the Transportation Infrastructure Finance and Innovation Act (TIFIA) programme, and with a cap on Operator investment of US\$ 45.2 million (inclusive of the land acquisition cap). If the TIFIA funding does not happen there is an option for the Department to develop, slicing the ACR between the Department as a toll free road (to the north) and the Operator as a toll road (to the south) for which the Operator pays on a net present value basis. Traffic forecast will be the key driver here.

Project Enhancements will be funded by whichever of the parties propose. Wilton Road is the expressed Operator Enhancement. The terms for these and for Compliance Orders seem quite usual.

Article 10: Department Oversight and Other Services

The Department has the right and obligation, without liability, to oversee the ACR (as a project Enhancement) and all and any thing else, at cost plus; save Ordinary O&M for which a US\$ 50,000 per annum cap applies. This is not unusual in principle, but doing so at the Operator's cost is. Usually the Operator would pay only for found default, not for found compliance. But then if it's in the terms it can be priced. The Cost of the Airport Connector construction and land acquisition is capped at \$45.2 and only goes ahead as the Sponsor's project if TIFIA funding is available. All operator costs and the cost of the Independent Engineer are included in the overall sum.

Article 11: Contracting Practices

These are quite standard; the inclusion of Small Business obligations should not have any adverse impact

Article 12: Other Transportation Facilities

The Operator has relief through a Compensation Mechanism for Competitive Transportation Facilities (CTF), new and expanded, but only where the Department has some control [distributing non-discretionary federal funds to other governmental authorities is not Department control]. The Department has agreed that compensation for Net Revenue Impact of CTF will cover discretionary acts by the Department as well as changes in law that remove present discretionary authority involving CTF. The Operator can negate the relief by uncorrected poor performance, releasing the Department from its obligations.

The mechanisms for correcting poor performance and seeking compensation are included and of course rely on alert and proactive management as the timescales are limited and likely to be rigidly enforced

There is no restraint on the Department in doing what it needs or wants to do by way of CTF by new or expansion; other than compensating for any substantiated impact. This is quite usual as the Department could not fetter itself in its ability to carry out its public responsibility

In the same vein the Department reserves its position to act in regard to Traffic Management Activities; including over-riding the Operator. In regard to Intelligent Transportation Systems (ITS) (cross facility traffic data collection) the Operator has relief for damage events.

Article 13: Reliance, Indemnification, Insurance and Compensation

The Department, in the usual way, limits the reliance the Operator can place upon the Department and extracts the usual indemnifications from the Operator regarding third parties.

Insurances required of the Operator are specified, but there is a relief mechanism for insurances that may sometime in the future become unobtainable on commercial terms. This relief mechanism relies on an agreement to agree an alternative, which may be its downfall. There is no definition of what commercial unavailability may mean; but just being more than was anticipated expressly does not excuse the Operator from satisfying the insurance requirements.

The Compensation Event mechanism relies on strict timescales, which is a management issue. Compensation by Damages, Net Revenue Impact or Net Cost Impact is available only for specified events and is not a blanket relief. The Department has the option on various methods of payment. Operator obligation to mitigate is standard.

Relief for Pre-Existing Hazardous Substances is included. Pre-Existing is before the Closing Date, or in the case of the ACR before construction commencement. A major, and potentially fundamental risk, has been transferred to the Department.

Article 14: Delay and Force Majeure

A reasonably standard definition is included although the exclusion of the Department from adverse Government action is not standard. In mitigation the Legal advisers are of the opinion that Section 13.05 covers "Discriminatory Action" by the Department. Specifically adverse impact of CTF is not Force Majeure; only Compensation. A standard mechanism is included but again strict timescales apply, with guillotines.

Article 15: Warranties

Fairly standard; including the caveat regarding the Financial Model (an estimate subject to change). This would appear to offer scope to the Operator regarding IRR, but the Operator carries any shortfall below the 6.5% in Article 5

Article 16: Termination

The Operator is compensated for Termination by the Department; other than for Operator default. This is standard. Typical mechanisms are included; but see Article 20. Unusually there is no Asset Condition prescription at Expiry or earlier Termination

Article 17: Defaults and Remedies

These contain the usual Default provisions allowing the parties to Terminate or in the case of the Department other remedies including step-in. In Operator Termination compensation is by Project Value (fair market value of Operator interest) to be assessed by an independent accredited party, or tribunal. There are mechanisms defined for the appointment of the accredited party but the procedure for valuation is left open beyond specifying that account is taken of projected cash flows and costs of the project for the remainder of the term. It is, however, subject to Dispute Resolution. Dispute Resolution is mediation, or any other mutually agreed form, and if not resolved, then litigation. Arbitration is not specifically included

Article 18: Reports and Intellectual Property

The provisions are all quite usual with cross supply of information arising before, during and at Termination, with the usual provisos. The Department has access and audit rights. Copyright for capital works is the Department, and for operations is the Operator for the duration. Software raises the source code issue. Here a source code escrow agent is introduced in default cases. Source code is a very sensitive issue and the parties cannot bind in a third party, agent or not. TUSA is allowed in the ARCA to utilize VDOT's Intellectual Property for operations and maintenance of Project and related activities. Department may not use the Operator's Proprietary Intellectual Property for any other purpose or disclose to any third party other than parties involved in the Project. The Department has the right to purchase licenses to use Proprietary Intellectual Property on other state highways on commercially reasonable terms.

Article 19: Reserved Rights

These are quite far reaching over, under and beside the highway, including the creation of other transportation and transit facilities, which could trigger the CTF compensation provisions. The Operator expansion rights are reserved. Operator compensation is by Net Revenue Impact or Net Cost Impact. Operator infringement compensates the Department by surrender of profit gain and transfer of Assets and land ownership

Article 20: Miscellaneous

All the provisions here are quite usual with but one concern. Payment of Operator Damage is subject to appropriation by the Virginia legislature. The Department is required to use its diligent efforts to have the damages incorporated in the state budget by the governor. In Force Majeure events that cause material damage to the James River Bridge, payment of damages may be subject to policy prioritization at the time. Should the Department elect not to re-build

the bridge, the Department Agreement is terminated and the Operator is awarded damages to the prescribed amount which covers senior & sub-ordinate debt.

Exhibit H: Operation & Maintenance

This collects together and expands upon the various plans to be prepared and followed by the Operator, the Reporting regime [assumed to be in the amended form], Operating Manuals, Standards and Procedures, Permits, and a procedure for a pre-Transition Period walk through and snagging list. The Standards and manuals match standard maintenance contract requirements apart from addition of the Operational Information System Procedure Manual. All this is very much as to be expected and raises no unusual risks. A number of detailed points are noted below:

- VDOT has the right to cause the Operator to use its best efforts to replace an employee, and only for cause. It does not give VDOT the right to unilaterally terminate any employee of the Operator. VDOT's specific right is consistent with its rights and interests in the Project generally as set forth in the ARCA, but it is not clear where in the organization the decision-making authority resides.
- Section III –A page 13 the environmental plan requires the Operator to mitigate noise impacts after consultation with the public suggesting an open ended process. TUSA confirm language will be included in the O&M Exhibit to clarify that the noise requirement refers only to instances where "noisy roadworks" are planned for nighttime working.
- The environmental plan also requires that there should be no decrease in surrounding water quality. The James River bridge deck currently drains directly to the river and the water quality will be reduced at each application of de-icer and in the event of any spillage. It is our understanding that TUSA intends to implement a drainage system at acquisition to collect runoff from the bridge And that runoff will be stored onsite and properly disposed of by a qualified transporter.
- Section III-B states different response times for emergencies in and out of work hours but does not explain when work hours are. It requires the Operator to arrive on site with 'necessary manpower' which is pretty open ended. This is not a material issue but has potential to increase cost of providing incident support. TUSA confirm that the AMP will define the required procedures, manpower and working hours in such detail to ensure they become contractual and avoid VDOT intervention.
- Section III-D requires lane closures to take place at night where possible. Given the low volume of traffic and the inherently unsafe nature of night time working it is recommended that TUSA seek VDOT's agreement that this requirement is not

necessary until traffic is closer to capacity. Avoiding peak hours should be sufficient to ensure that traffic is not impeded for a number of years. The agreed procedures should be defined in the AMP.

- Section III-D and III-F contradict each other in terms of whether the Operator may close the road. The last paragraph of Section D states not but the first paragraph of Section F states that they can.

Attachment A covers Performance Standards; this is, in principle, quite usual and necessary for the parties to monitor performance. This section of this Report does not comment upon the technical practice of the levels or timescales of performance. There is no incentivisation regime. Compliance is by Compliance Order from the Department or Operator default. This could be a blunt instrument, but manageable.

The tolerance and criteria contain a number of instances where fairly substantial maintenance activities are required to be carried out within 30 days, culvert repair for example. This will result in higher maintenance costs as the maintenance contractor will be unable to schedule maintenance efficiently.

The criteria for snow and ice control requires that all pavement travel lanes are kept open free of frozen precipitation (snow and ice) throughout the inclement weather occurrence. This requirement is onerous and will rely on the judgement of the Inspector. In practice, however, TUSA will only be required to meet similar performance as the roads that feed into the project road, which VDOT will be clearing.

Exhibit D: Technical Support Agreement

A short agreement between Transurban, Transurban (895) LLC (Operator) and the Department; the agreement is unconditional and irrevocable and one upon which the Department can expressly rely; for an arms length adjustable and upwards only indexed (CPI) linked maximum US\$ 300,000 per annum, payable by the Operator to Transurban. The Operator takes liability throughout. Termination is linked to the ARCA. It does not appear to impact the risk profile

Updated ARCA 31st January 2006

Whilst still incomplete, the main impact of this update is on the ACR, where the US\$ 4.5 million Operator land contribution and US\$ 45 million cap on Operator expenditure has been dropped for a process of open book procurement (including a lump sum Design and Construct subcontract). If the conditions precedent, primarily the TIFIA funding, to Operator development are not achieved the Department has the option to develop alternatively and turnover the tolled section to the Operator who is obliged to pay the projected net increase in revenue minus costs from the ACR. Operator development is at Operator cost so the revenue/cost/debt equation will be the driver at the time

Various matters have been tightened up particularly relating to the Financial Model (audit) and valuation mechanism in Project Value

Tolls are now prescribed through to 31st December 2016 and by formula thereafter

Asset Condition at Expiry or earlier Termination are now prescribed

Conclusion

The ARCA appears to be a workable document, subject to the revisiting comments above and subject to the Financial Model reflecting the underlying risk transfer and operational risk profile. Whilst there is relief for the Operator in CTF and exceptional events the essence of the risk transfer is that the Operator takes the risk on revenue and supply cost; with an IRR cap. The supply cost includes operation, maintenance and capital replacement. Consequently it throws into sharp focus the fundamental importance of:

- The Traffic Forecast
- The Asset Management Plan
- The Financial Model

5.2

Transurban's experience

Transurban is a nearly \$6 billion AUD business with more than 10 years experience in the development, ownership and management of complex toll road infrastructure. The company owns three toll road assets in Australia, and pursuing a number of projects in the US, UK and western Europe.

The Australian Projects are:

- **CityLink**, is a 22 kilometre motorway links manufacturing hubs with the CBD, port and airport. The road was one of the first fully electronic roads in the world when Transurban commenced tolling traffic in January 2000. The road incorporates two long tunnels, one major bridge, an elevated roadway and 17 interchanges
- **Westlink M7** is Sydney's first distance-based fully electronic toll road which opened to traffic on 16 December 2005. Westlink M7 is a 40 kilometre fully electronic road that is set to significantly improve access to western Sydney. Thirty-eight over- and underpasses, 144 bridges and a 40 kilometre separated cycleway and walking path are being constructed as part of the project to improve access for communities along the motorway corridor.

- **The M2 Hills Motorway** is a 21-kilometre, four lane motorway that links the lower north shore and the northwest regions of Sydney, Australia. The M2 opened to traffic in May 1997 and Transurban acquired motorway in June 2005.

The Citylink project offers the closest comparison to the infrastructure to be operated on the Pocahontas Parkway as it includes the major bridge and is Transurban's longest running operational road. The road opened to traffic in August 1999. The M2 has been open since 1997 but Transurban's involvement started only in June of 2005 and the M7 only recently opened.

This record shows a strong capability in closing a deal and setting up tolling operations. The longer term asset management capabilities have yet to be confirmed and this reinforces the need for a strong asset management plan.

USA Projects

Transurban has no operational roads in the US but is pursuing four key projects in the state of Virginia, and is in an exclusive or preferred position on three of them and short-listed on the fourth. The projects are:

- Pocahontas Parkway
- Capital Beltway (I 495)
- I-95/395
- Dulles Toll Road

The company is also short-listed on two projects in Dallas-Ft Worth, Texas:

- SH 121
- IH 635 ("LBJ")

6 Contractual chain

6.1 O&M Contract

This is expected to accept all relevant risk from the Concession Contract on a pass-through basis. Payment terms will be a key issue if these are not pass-through.

Current market O&M contractors are not large concerns. Only VMS have the backing of larger companies; Louis Berger and Jacobs Sverdrup Civil. Other companies might enter the market in the future but at present it would not be prudent to rely on large risks being transferred. Whilst it is reasonable to pass routine risks to O&M contractor, larger risks for big ticket items will not realistically be borne by the O&M contractor.

6.2 O&M supply chain contracts

TUSA envisage subcontracting the majority of operations, routine maintenance and major maintenance works. The contracts envisaged by the Operator and the current status of each contract are summarised in the following table. Unless otherwise noted, the Operator intends to use the listed contracts.

Contract	Service	Currently Between	Expiry Date	Can be Novated? (Y/N)
Electronic Toll Collection Agreement dated July 19, 2005	Toll collection administration and operations services, including collection of Smart Tag and E-ZPass tolls, distribution of transponders, customer services.	VDOT and PPA	The earliest to occur of: (i) the date the ETC Servicer no longer provides services (unless extended by agreement of the parties with the engagement of a substitute ETC Servicer), (ii) the date on which the agreement is terminated by either party and (iii) June 30, 2006 subject to successive on-year renewals.	Y - No restriction on assignment.
Maintenance Service Agreement No. 100 dated May 19, 2005	Maintenance of ETMM and Violations Enforcement Systems; SmartTag, Enforcement Processing, residual services	Intrans and PPA	May 2006, with three successive one-year extensions upon mutual agreement of the parties.	Y, but with the prior consent of the other party (such consent not to be unreasonably withheld)
Contract with	Software maintenance and	Tecnicon and VDOT	Started May 9, 2005, two 1-year term	Likely Y – the contract is silent as

Contractual chain

Contract	Service	Currently Between	Expiry Date	Can be Novated? (Y/N)
Tecnicon dated May 6, 2005	video enforcement system maintenance and support		extensions allowed	to assignment.
Contract No. 709-WB dated October 16, 2000 for operation of Smart Tag operations centre	Smart Tag operations centre	Castle Rock and VDOT	Dec 31, 2005, but on-going until Transcore transitions into provision of services (currently expected ~ April 2006)	Castle Rock is being replaced by Transcore TUSA will keep until contract with Transcore comes into effect
Contract with Transcore to replace Castle Rock contract [not yet in effect]	Smart Tag operations centre	Transcore and VDOT	Planned start April 2006	Not known – VDOT to provide contract when fully executed
E-ZPass Operations Interagency Agreement & Reciprocity Agreement dated July 30, 1998	Regional coordination and management of E-ZPass; sharing of customer account information and reconciliation and settlement of accounts among the agencies	VDOT and other state & toll agencies	Any member may withdraw from the Interagency Agreement with 30 days prior notice.	N – Express prohibition of assignment. [VDOT is a full member of the interagency group. Query possibility of admitting private toll operators to the interagency group.] TUSA will pay \$80,000 annual charge to VDOT to maintain the agreement
VMS	O&M, snow clearing	VMS and VDOT	Not known	
Agreement with Virginia Dept of State Police (VDSP) dated October 7, 2002	State patrol services	VDSP and VDOT	Ongoing until terminated by mutual consent of the parties with 60 days prior notice	N/A - VDOT is required to arrange for police services comparable to services provided on other state highways at no cost to Operator. Primary patrol services will be provided by Henrico County Police Dpt
Wetland Studies and Solutions	ACOE Wetland permit reporting	FD/MK and WSSI	Monitoring is complete. No monitoring costs will transfer.	Not required.
Licensing	Grant of license to	Intrans	Not known – subject	TUSA and Orrick

Contract	Service	Currently Between	Expiry Date	Can be Novated? (Y/N)
Agreement dated November 3, 2003	VDOT to use source codes for proprietary computer software for the operation of the ETTM system ("Source Code")	and VDOT	to ARCA negotiation.	confirm that access to source codes are included in Section 18.05 of the ARCA.
Escrow Agreement dated May 4, 2004	Escrow arrangement for Source Code.	Intrans, VDOT, FD/MK, LLC and SunTrust Bank (as escrow agent)	Escrow agreement terminates upon the delivery of the Source Code to the Operator or VDOT pursuant to the terms of the agreement. — subject to ARCA negotiation	Agreement is silent as to assignment.

6.3

O&M management

No information is available at this time on the management personnel. The outline organizational structure shows a general manager supported by an office manager and an operations manager. It is not clear on the support staffing levels but the overall budget for support staff is not unreasonable so in our opinion it is not considered a significant risk. A list of responsibilities for each staff member including duties and tasks that will be outsourced to the independent consultants and service providers has been provided for review. There are a number of duties referred to in the AMP that will require significant input from senior staff, these include environmental, safety and quality assurance management and HR and IR management. The budget allowed for the support personnel is based on the PPA's operating expenses to date and is considered adequate.

It is not known whether any existing PPA staff will transfer to the Operator.

7 Environmental issues

7.1 Environmental impact

Environmental Review Process

The State Environmental Review Process (SERP) provides for a balanced consideration of environmental and transportation needs during the development of highway projects. It helps to avoid delays by involving state environmental agencies at the earliest possible stages.

The National Environmental Policy Act (NEPA) requires environmental impact statements or environmental assessments for certain classes of federal projects and actions. The Office of Environmental Impact Review participates in three phases of the National Environmental Policy Act review process: scoping, draft document review and final document review. The office coordinates federal intergovernmental review for all federal actions and locally sponsored projects that are federally funded.

Also, all federal actions and programs that directly affect Virginia's coastal zone must be carried out in a manner that is consistent with Virginia's Coastal Resources Management Program. Office of Environmental Impact Review may review federal projects for consistency during the National Environmental Policy Act process.

Where a project impacts wetlands and waterways the environmental review process requires that mitigation measures are put in place. Permits are required from the State Department of Environmental Quality and from the US Army Corps of Engineers.

Our review of the available documentation indicates that the state and national environmental reviews have been carried out and signed off by the relevant agencies. The mitigation measures required under the permits have been approved and the monitoring periods completed to the satisfaction of the relevant agencies.

Environmental Impact Statement

An Final Environmental Impact Statement (FEIS) was prepared for the Pocahontas Parkway in 1984 and re-evaluated by FWH in 1994. The original EIS, the correspondence relating to the re-evaluation and the record of decision has been reviewed. The process is summarized below:

1. An approved Draft Environmental Impact Statement containing the alignment Alternatives A, B, and C was circulated for comment on February 1, 1983.
2. On August 31, 1983 the Virginia Department of Transportation submitted the Final Environmental Impact Statement to the Federal Highway Administration for review and approval.
3. On June 13, 1984, the final Environmental Impact Statement was signed by the Regional Federal Highway Administration

4. On September 30, 1994, a re-evaluation of the Final Environmental Impact Statement was signed by the Federal Highway Administration.

The 1994 re-evaluation involved new field surveys to ascertain any changed environmental conditions that might be affected by the construction of the Parkway Project and review and confirmation of the findings set out in the FEIS. This re-evaluation did not identify any significant alterations from the FEIS assessment of environmental impacts. The Federal Fish and Wildlife Service confirmed by letter that their requirements are met in the 1994 review.

The FD/MK proposal in 1998 was based on the 'Line A' option described in the FEIS. In VDOT's judgment there was no requirement to update the FEIS for the PPA design and build contract; and in a communication dated August 24, 2005, VDOT stated "There are no NEPA-related environmental commitments (project did not use federal aid) for the Pocahontas Parkway or 895 Airport Connector". Although this interpretation is open to argument, legal counsel has advised that a statute of limitations of 6 years applies to challenges to environmental reviews and so there is no risk of challenge to the process as it has been applied to the I-895.

Wetlands permits I-895

The FEIS recognized that the construction of the I-895 would impact on a significant area of wetlands and waterways. Wetlands Studies and Solutions, Inc completed wetlands permit applications for the Pocahontas Parkway (Route 895) and the Richmond Airport Connector. The studies commissioned by FD/MK and satisfied the requirements of Virginia Marine Resources Council, Virginia Department of Environmental Quality, and the Army Corps of Engineers.

The project impacts were authorized by two 404 US Army Corps of Engineers permits and two VADEQ 401 Water Quality Certifications. A 70-acre wetland site in Henrico County constructed by Wetland Studies and Solutions (WSSI) serves as mitigation for the permits.

Copies of the US Army Corps of Engineers permits were reviewed and copies of the letters confirming completion of the monitoring of the mitigation sites have been seen. All permit conditions have been met and the FD/MK bonds were released.

The Virginia Department of Environmental Quality has stated in a letter dated November 8, 2004 that they are satisfied that the requirements of the permits have been met.

7.2 Other Obligations

VDOT has a number of environmental programs that it operates on various highways around the state.

- Adopt-a-Highway
- Bicycling and Pedestrian Program
- Cultural Preservation Program

- Peregrine Falcon Program
- Rideshare Program
- Scenic Byways Program
- Transportation Enhancement Program
- Wildflower Program
- Wetlands Program
- Erosion & Sediment Control Contractor Certification

TUSA have confirmed that VDOT have stated in negotiations that compliance with these programs is not required on the Parkway.

7.3

Risks

General

The ARCA places the cost of mitigating pre-existing environmental conditions with VDOT, which greatly reduces the consequence of environmental risk.

Stormwater Pollution Prevention Program

Regulations require that all regulated facilities have a fully prepared and implemented Spill Prevention, Control, and Countermeasure, or SPCC Plan. The environmental management plan required in the ARCA will incorporate an SPCC. The plan has to be written to VDOT standards.

Virginia Pollutant Discharge Elimination System Permit Program

A VPDES permit will be required for the RAC, but not for normal Parkway operations. A stormwater pollution control plan will be a component of the environmental management plan required by the ARCA.

Contaminated land; Dupont Facility

There is one location at which pre-existing hazardous substances are known to exist, which is the location of the west bridge abutment of the bridge spanning the James River. The abutment is located within an area of known contamination due to a plume of dissolved-phase chlorinated solvents associated with the DuPont Spruance facility. This hazardous-waste generating facility is under regulatory control of the Virginia Department of Environmental Quality and the Federal EPA.

Marshall Miller and Associates completed a combined Phase I/Phase II Environmental Assessment report in August 1997. They undertook limited soil sampling in the stormwater

basins in the Parkway right-of-way to test for the presence of chlorinated contaminants originating from the DuPont Spruance site.

A review of documentation shows that there was concern that the construction of the bridge and interchange could impact on the groundwater plume and cause problems at the construction stage. In particular (1) whether soil and groundwater at this location would be considered "hazardous waste" and be required to be treated prior to disposal; (2) whether the foundations for the bridge would be drilled or driven (as pilings) to mitigate disposal requirements; and (3) the sharing of costs with respect to management of the hazardous substances. According to documentation provided by VDOT, soil and groundwater were either going to be treated at DuPont's on-site treatment facility or disposed of in accordance with Virginia's hazardous waste and solid waste management regulations with VDOT and DuPont being the generators on record for the EPA disposal manifest. Construction records and communication with VDOT indicate that the bridge foundations used driven piles to limit arisings from the construction.

Initial issues of concern to the team were: (1) disposal of soil and groundwater during construction; (2) whether the construction exacerbated in any way the contamination conditions at the west bridge abutment; and (3) whether future cleanup could be required that would involve the operator.

1. It is known that efforts were made to limit generated soil and produced groundwater and there was oversight from VDOT and Dupont regarding the waste disposal. However, no soil disposal manifests were made available by VDOT. Information provided by VDOT indicates that produced soil and groundwater were disposed of in accordance with state regulations.
2. TUSA has stated that they have had conversations with the Remediation Manager of the DuPont site and the regulator at the EPA that suggest that the plume originating at the DuPont site has not migrated since the testing was performed by Marshall Miller and Associates, indicating that it was likely not impacted by the construction of the Parkway. The impacted groundwater plume is monitored quarterly by DuPont.
3. The ARCA limits the Operator's exposure to pre-existing contamination. VDOT retain responsibility for remediation of pre-existing environmental contamination.

It was noted that VDOT have not had any special measures in place to take account of the existing groundwater contamination during the maintenance of the Project Road. However, to date there has been no need to carry out works underneath the interchange. The ARCA obligates TUSA to detail remedial measures needed should maintenance activities involve disturbing the ground in this area.

The work carried out to date to identify the status of the contaminated ground near the Dupont facility on I-95 includes a Phase 1 survey. The survey revealed four cautionary signs located in the center of the right of way beneath the interchange, as well as along it's northern and southern borders, warning of the presence of buried pipelines. These signs indicate that potentially hazardous materials are being conveyed through the pipelines, including sulfuric

acid, an unspecified weak acid and petroleum. Any leakage from the pipes represents a risk to the foundations of the bridge. The AMP would be required to describe the monitoring regime to ensure leaks do not affect the bridge foundation. TUSA have indicated that they will mitigate the risk by passing it on to contractors. The Sponsor's legal advisers state that: The pipe situation would constitute a pre-existing hazmat to the extent there has been leakage in the pipes in non-compliance with environmental laws that has occurred prior to the closing date and has not been exacerbated by the Operator. The Operator will undertake regular inspections.

8 Operations and maintenance

8.1 PPA Reports

The PPA is required as part of the bond conditions to carry out an annual condition assessment of the facility. We have reviewed the 2005 report produced by URS; Assessment Of Maintenance And Operations For Roadway, Drainage & Bridges Along Route 895 (June 27, 2005) and based on an inspection of various issues raised in the report conclude that it accurately represents the condition of the Project Road at the time of inspection. The report concluded that there were only minor issues requiring attention and a letter from James Atwell of the PPA confirms that the work recommended would be carried out.

8.2 VDOT reports

The review team met with VDOT staff Gary Jennings (Assistant Resident Engineer) and Gary Ludgate (Assistant Resident Engineer) who have responsibility for operations and maintenance of the Parkway. The maintenance is managed from VDOT's Sandston Residency.

The interview revealed that notwithstanding cyclical activities such as grass cutting, most current maintenance is carried out on an ad-hoc basis reacting to comments and complaints from the travelling public or to observations made by staff in travelling the road. We were surprised to learn that there are no formal maintenance plans in place and that documents such as the manufacturer's manuals for bridge bearings and joints are not available. There is no plan for managing maintenance of the James River Bridge. Whilst this approach has been adequate to date due to the young age of the road we would expect the AMP to formalise the management processes and procedures in the future.

We have reviewed the VDOT budgets and expenditure for highway maintenance and conclude that the relatively low annual figure is based on the fact that the road has been under warranty during this period.

The maintenance carried out to date, whilst not formalized in a maintenance plan, appears to have been appropriate given the relatively new asset.

8.3 Asset management plan

The AMP demonstrates how the service provider intends to meet the contract requirements for operation and maintenance of the asset. It will define the management structure, the replacement regime of all components, the levels and periods of maintenance, assign responsibilities and define the processes and procedures for dealing with the matters covered by the standards and performance requirements in the Concession Contract.

The AMP has not been fully developed at proposal stage. A general outline plan has been put forward that is based on Transurban's operations on its roads in Australia, in particular the CityLink in Melbourne. The plan as it stands represents a reasonable outline plan but it does not address specific points relating to the management of the Pocahontas Parkway. In particular there is no reference to contingency planning for major events or emergencies although it is noted that ARCA Exhibit H requires this to be prepared during the Transitional Period. The plan should define the responsibilities of each of the parties involved in maintaining the road and most importantly define the communications required between the parties. Currently the outline plan has been supplemented by an outline organizational chart and a table defining the tasks to be carried out by the operator and those to be contracted out. The proposed split of responsibilities is reasonable. It is recommended that the legal advisors comment on our suggestion that the final AMP is independently reviewed and subject to amendment and approval of the lenders' under the financing agreement.

Contingency Planning

We have not been able to review how risks such as major weather events, geotechnical risks, or major accidents causing substantial damage to the infrastructure will be dealt with. If for example one of the bridges across the James River needs to be closed, what effect does this have on revenue and how will it be mitigated? Whilst some scenarios will be highly unlikely they could have a significant effect if they do materialise. The AMP should include procedures for dealing with these types of risk events to mitigate their effect. Conversely other events such as major storms will almost certainly affect the facility, although to a lesser extent, and need to be mitigated. Currently VDOT do not appear to have formalized contingency plans in place. ARCA Exhibit H requires that incident response planning is put in place during the Transitional period. The Exhibit describes a comprehensive list of incidents that must be planned for including Force Majeure events.

The Richmond area has been subjected to a number of severe weather events in recent years. The Virginia Department of Emergency Planning references Hurricane Isabel in 2003 which caused 32 deaths and \$1.9 billion worth of damage and also Tropical Depression Gaston (2004) and Tropical Storms Jeanne (2004) and Floyd (1999) which all caused major damage and prompted federal disaster declarations. Virginia is also susceptible to tornadoes with 85 tornadoes rated at F2 or less recorded in 2004. This risk is not significant but requires the AMP to detail procedures to be implemented during outbreaks of severe weather.

Definitions

In this report we have considered routine maintenance, operations and major maintenance defined as follows:

Routine maintenance: cyclical maintenance work that would be expected to be carried out on an ongoing basis. This includes minor repairs, sweeping, mowing, snow and ice clearance and the like.

Operations: services to the travelling public and back-office work required to operate the project facility. This includes customer services, toll collection, enforcement, marketing, management costs and the like.

Major maintenance: this covers the periodic renewals, replacements and upgrades of infrastructure and equipment. This includes re-surfacing, bearing replacement, toll equipment upgrades etc.

Design lives

The operational service life of the various elements of a highway facility varies greatly dependent on the environment, usage and maintenance regime.

The back-up information provided to justify the sculpted major maintenance reserve indicates that the service lives stated in the following table have been considered for the major components of the project road.

Details of Expenditure	Apparent Frequency	Comments
	(years)	
Civil:		
Pavement. Mainline	7	OK*
Pavement. Plaza	7	OK
Pavement. Bridge	7	OK**
Pavement. Elevated	7	OK
Bearings. Bridge	25-30	OK
Bearings. Elevated	25-30	OK
Expansion Joints: Bridge	40	20 years more likely
Expansion Joints: Elevated	40	20 years more likely
Expansion Joints: Mainline	40	20 years more likely
Signage Gantries	25	OK
Signage - Regulatory & Warning	10	OK
Noise walls, Grates & drainage	15-30	OK
M&E:		
Electrical Distribution Boards	20	Ok

Details of Expenditure	Apparent Frequency	Comments
Street Lighting.	25-30	OK
Flood prevention pump sets	10	OK
Common systems: (Tolling & Safety)		
Fibre Network & System	15-25	Technological upgrades?
CCTV system	10	OK
METS system	10	OK
Roadside Tolling - Gantries	30	OK
Roadside Tolling – Equipment	6-8	OK
Main Toll Plaza Building:		
Air Conditioning (Exh, Vent & Cont)	10-12	OK
UPS & Battery Bank system	10-12	OK
Fire detection system	10-12	OK
Security system	10-12	OK
Electrical Distribution System	10-12	OK
PABX & Comms system	10-12	OK
Emg/Exit Lights	10-12	OK
* No structural repair of pavement allowed for at 30-40 years but the financial model includes additional costs from year 50. The pavement construction details are reasonable for the forecast traffic so this does not represent an unreasonable assumption		
** Concrete deck to bridges replaced at longer interval but at greater cost		

There are a number of components not mentioned in the schedule of major maintenance which we would expect to be allowed for such as toll booth replacement (or removal), bridge parapet repair or replacement, major earthwork repair. The bridge deck replacement seems to be allowed for at the same cost and frequency as asphalt surfacing replacement whereas we would expect it to be significantly more expensive although less frequent.

A global review has been carried out based on a calculation of the main quantities for pavement and structures taken from the preliminary drawings. Based on the service lives stated above and on unit rates taken from the reviewer's database with a contingency allowance for smaller items we conclude that overall the costs allowed for major maintenance are of the correct order.

Major maintenance

Major maintenance will be required at periodic intervals matching the economic operational life spans in the table above. Major expenditure items will be the pavement, bridge decks, bridge joints and bearings, drainage structures and tolling equipment.

The period of the concession is 99 years. In this case allowance must be made for reconstruction of the road pavement and replacement of the bridge bearings and joints. The financial model includes additional costs for replacement of bridge joints and bearings from year 50. This is not an unreasonable assumption. TUSA has advised that the forecast linear major maintenance spend is intended to allow for uncertainty in such a forecast, for example the risk of early bearing replacement, and that "access" by snoopers has been budgeted in the cost of bridge bearing replacement.

The back up information on the build up of the major maintenance costs provides only a summary of the major expenditures. It does not define the works envisaged in any detail and does not include any risk analysis on the expenditures. TUSA has agreed to maintain a Extraordinary Maintenance and Repair Reserve (really a 'planned maintenance reserve') which will be sized to contain the greater of 110% of the Extraordinary Maintenance costs of the work to be performed in the following year or 100% of projected costs for each task to be performed in the first year of a five year assessment period, 66.67% of projected costs of each task to be performed in the second year, and 33.3% of projected costs for each task to be performed in the third year. This formula has given VDOT comfort that major maintenance expenses will be adequately covered.

Pavement

Replacement of surfacing would typically be expected between 8-12 years. The relatively light traffic on the Parkway to date would point to a first replacement date sometime beyond the lower figure. However, forecasting of pavement and surfacing life is difficult until time series data are available; the first few years of pavement life are typically settling periods where data can be variable.

The cold joints that formed in the existing surfacing have been repaired and there is no sign of rutting in the surface. The local aggregate used in surfacing materials is not prone to polishing so it is unlikely that skid resistance will be a factor in the replacement. Consequently there is nothing to suggest that the surfacing will not last at least 8 years before requiring replacement. VDOT maintenance engineers predict that surfacing replacement will not be needed until 2010-2012. TUSA have allowed for complete resurfacing in 2008-2010.

The localized subsidence problems associated with culvert crossings will require small scale repairs but will not have a major impact on the pavement life if properly monitored and repairs

are made in good time. It is likely that these problems will settle down over the next few years and we do not foresee a long term liability.

Structures

A selection of the design submission drawings have been studied coupled with a visual inspection of design details in the field to establish the maintenance liability of the structures.

Overpasses and underpasses

From inspection the structures along the roadway are standard highway design and would not represent a risk beyond the standard risks associated with the maintenance of highway structures. The single span bridges on Route 895 over crossing roads have integral abutments obviating the need for bearing replacement.

I-95 Interchange and James River Bridge

The large pre-stressed box girder of the river bridge is one of the largest spans for this type of construction in the US. Despite some apparent firsts for bridge design in Virginia, it is within the limits of the technology used and does not pose any risk due to untried technological innovation.

The integral construction of the main span and back span deck and piers eliminates the maintenance of bearings and joints. The configuration of pre-stressing tendons appears to be of standard format with tendons running within the walls of the box girder used for segmental casting during construction and exposed tendons inside the box girder tensioned on completion of casting.

It doesn't appear that any allowance has been made for jacking points to the bearing shelves has been considered in the design although it might be possible to make replacements without closing the ramps. The interchange ramps are at high level causing potential problems with access when maintenance is required. TUSA have stated that the cost of a 'snooper' has been allowed for access to work required underneath the high level bridge decks. There is adequate space within the hard shoulders to allow the platforms to operate without closing the ramps. The cost of maintenance will be dominated by the issue of access.

Drainage

The drainage is predominantly open ditch in cutting and at grade with piped drainage on the larger embankments. There are a limited number of culvert crossings and highway drainage outfalls to the adjacent Osborne Creek via settling ponds.

The maintenance of open ditches does not entail any major expense. The maintenance of the piped drainage underneath embankments could entail some expense if major repairs are

required but this is not a material risk. TUSA will develop the AMP with the prospective O&M contractor to include inspection and maintenance of piped drainage.

The possibility of storm water run-off polluting adjacent waterways is addressed in the section on environmental issues.

Tolling equipment

The existing tolling equipment is due to be replaced and the costs have been allowed for in the financial model. Although we have not seen the planned system configuration Transurban's position as a market leader in electronic tolling gives comfort that the selected system will perform as required.

Tolling equipment will often be upgraded before it reaches the end of its economic life. In this case it is difficult to predict the cost of the replacement technology for future upgrades. However, it is reasonable to assume that the investment in improved technology will only occur when a cost benefit analysis justifies the investment. It is also reasonable to assume that improvements in technology will be cost neutral, similar to computers, and that benefits accrue from increased efficiency. It is to be noted that VDOT may require upgrading of the Sponsor's ETC system if the state-wide system changes; this process is covered in the ETC agreement.

TUSA have stated that the tolling and electronic detection equipment will be maintained either by the manufacturers or by a specialist company. The current contract with InTrans will be novated to the Operator.

The Operator has had access to existing operating and maintenance costs and has based his FY06 forecast on these. The costs are made up as follows:

- Cash toll collection – a base cost of \$453,000 is based on the employment of 25 toll collectors plus necessary supervision and support staff, which seems adequate to man the existing toll booths. The Sponsor is proposing a 10% reduction compared to present levels based on night shift reductions and greater use of coin machines, and this seems achievable.
- ETC toll collection – a base cost of \$231,000 is based on VDOT's estimate of a fee of 8 cents per transaction, escalated by the Sponsor to 9 cents plus a 10% contingency added. This seems reasonable and correlates with the 2005 traffic figures. The Sponsor is escalating these costs in line with the Consumer price index but not with increases in traffic. This is because under VDOT's current arrangements with PPA, to be continued with TUSA, the transaction costs are linked to the cost of providing the clearing house and are effectively independent of increases in traffic flows.

- Tolling equipment O&M – a base cost of \$227,000 is based on existing PPA figures, based on the existing service provided by InTrans

The cost of maintenance is escalated with appropriate indices and based on the existing service provided by Intrans and Technicon. The effects of increased traffic should be minimal as expansion of the facility is not forecast in the foreseeable future.

The Sponsor has allocated the sum of \$1,000,000 for an upfront upgrade of the video enforcement system (VES). This is based on VDOT's own estimate of \$800,000, escalated to cover project management and contingency.

The Sponsor has made an initial estimate of the cost of the refresh of the roadside equipment (tolling and VES) of \$750,000, recurring every 7 years. A further \$7M will be spent over the first three years on a full replacement of the ETC system.

Routine maintenance

Routine maintenance is an ongoing expense. To date invoices to PPA from VDOT for highway maintenance show no abnormal expense, last year's call-off was around \$300,000, over \$80,000 under budget. The majority of the budget, \$260,000, is allowed for snow and ice clearance, \$160,000 was spent in last year's relatively mild winter. This is representative of the relatively good condition of the Asset.

The sum allowed for in the financial model to cover routine maintenance is \$558,000 annually with a further \$306,000 allowed for snow and ice control. This amount is greater than the sum utilized by VDOT to date although it is the view of the team that the cost of maintenance will rise as the facility ages.

No breakdown of the routine highway maintenance costs has been given so individual rates have not been checked for reasonableness. However, as a check on the overall figure an estimate of the overall lane miles of roadway (including ramps and toll plaza) and the area of bridge decks to be maintained suggests that the overall figure is reasonable. Based on an estimated total 86 lane kilometers (54 lane miles) and an overall budget of \$864,000, the cost per lane kilometer of routine maintenance including snow and ice control is around \$10,000. Overall management costs are allowed for separately. This compares favorably with other toll highways where spending typically varies from \$8,000 to \$15,000 per lane kilometer (not including ramps). The effect of including the ramps and toll plaza in the I-895 calculation is to produce a conservative estimate for the cost comparison. This was done as the ramps represent a significant proportion of the total facility; approximately 30%.

A further comparison can be made with VDOT highway maintenance contract with VMS who currently maintain 250 centre line miles of Virginia's interstate highways at a cost of \$131.6M

over 5½ years. This equates to approximately \$10,000 per lane mile annually and includes the cost of preventative maintenance and replacements.

Snow and Ice Control

The weather in the winter in the Richmond area is difficult to predict and consequently the cost of snow and ice removal will vary greatly year on year. Last winter was particularly mild although the year before was particularly severe with two consecutive weeks of continuous operations for snow and ice clearance.

VDOT is to provide the Operator with access to the service contracts and prices that VDOT currently uses. This allows the Operator to take advantage of economies of scale. This provides a level of comfort that the cost allowed in the financial model is adequate.

Magnesium chloride is used as a de-icing agent on the river bridge and the I-95 interchange ramps. This is generally accepted to be less corrosive than sodium chloride although there is some risk to galvanized steel and aluminum fixtures. The lighting columns on the bridges are set above road level on top of the parapets so the risk is minimized.

It was noted that during an ice storm in the winter of 2003-4 ice formed on the outside of the bridge parapets and then fell onto the running lanes of I-95 during the thaw. The AMP should contain procedures to prevent this occurrence in the future.

Health and safety

The major health and safety issue in highway operations is work zone safety. Working alongside live traffic lanes is extremely dangerous and must be carefully supervised. We will expect to see due consideration given to traffic maintenance and training of operatives in the asset management plan. The AMP should meet the requirements of the Virginia work area protection manual; standards and guidelines (2005).

Emergency planning

Typical events that would require contingency/emergency planning:

- Major highway accident.
- Suicides from the main bridge (2 to date)
- Airplane crash on or near the highway
- Major earthquake
- Truck toppling from the bridge onto highway I-95
- High winds, storm event,
- Major snow event,

- Chemical spillage

We anticipate this Emergency Planning will be addressed as part of the Asset Management Plan. Issues to consider: liaison with police and emergency services, detour routes, infrastructure repair, containment of pollutants, emergency repairs, standby equipment, loss of revenue, insurance requirements.

Operations Costs

Financial model operations costs are based on VDOT budgets for financial year 2005-06. The projected operations costs are amended by Transurban to include general liability insurance, provision of Smart tag services and public relations, legal and media services.

Highway maintenance costs

The headline figures are used in the financial model for routine maintenance, snow and ice control and major maintenance. The overall figures have been compared to overall highway maintenance expenditure for similar facilities and the figures appear reasonable. However, the build up of the figures and the risk allowances is not sufficient for detailed analysis.

The VMS estimate for routine and preventative maintenance and snow and ice control is significantly more than the historic costs invoiced by VDOT. This appears reasonable as it is the reviewer's opinion that VDOT's allowance for highway maintenance reflects an ad-hoc approach to the maintenance of the Parkway. Any preventative maintenance required to date has been carried out under warranty and so has not been allowed for in the VDOT budgets.

Initial comments on the financial model are that the traffic and revenues are forecast to increase steadily over the concession period but that the O&M costs, including the capital reserve, are constant until additional major maintenance cost is allowed from year 50. This is not an unreasonable assumption.

Sinking fund

The ARCA requires the Operator to maintain an Extraordinary Maintenance and Repair Reserve or Extraordinary Maintenance and Repair Letters of Credit to cover the cost of preventative maintenance and major repairs forecast for the following 3 years. The Operator is required to submit to the Department the life cycle asset maintenance model for the Project prior to the Agreement Date. The Life Cycle Maintenance Model is to be accompanied by an Extraordinary Maintenance and Repair Work Schedule that includes a description of all Extraordinary Maintenance and Repair Work projected to be completed during the Term including estimated costs and timing. TUSA confirms that this exhibit will be reviewed by the lenders' technical and legal advisors..

The forecast cost of Extraordinary Maintenance and Repair has been allowed for in the financial model through the inclusion of a capital reserve, the annualized figure for the capital reserve is \$1.85M. The financial model shows a sculpted spend that allows for a level of uncertainty in forecasting the actual year of treatment. The figures behind the build up of the capital reserve have not been presented in a form that allows detailed analysis and it is not clear what risks have been allowed for on individual elements within the reserve, although overall the assumed frequency of major repair and replacement is reasonable. Calculations based on total lane length and total area of bridge deck suggest that the reserve is sufficient to cover standard repair and replacement of the roadway and ancillaries and to replace bridge deck surfacing, parapets, bearings and joints at reasonable intervals. The risk allowance made for extraordinary maintenance that might be required should an element fail prematurely should be detailed in the Life Cycle Maintenance Model. The Extraordinary Maintenance and Repair Reserve and the independent view of the maintenance schedule from the Independent Engineer will help ensure that maintenance is correctly scheduled and reduce the risk of unforeseen expenses.

8.4

Operations and maintenance contracting

There are a number of options for maintenance of the Asset:

- In-house crews
- Sub-contractors managed by in-house staff
- Full highway maintenance contracts

Procurement

It is understood that the Sponsor is in talks with highway maintenance contractor VMS for the provision of performance based highway maintenance services. The contract is based on the updated version of VDOT's current contracts for the I-64 sent to bid earlier this year. The contract terms and conditions are in line with industry best practice in maintenance contracting in the US and are considered appropriate for the Project Road. The contract will require minor amendments to take account of the change in Client from VDOT to the Sponsor.

It is understood that there will be a transition period of 6 months from the date of contract signing to the date of full transfer of maintenance responsibility from VDOT to the Sponsor. This period is considered adequate if the procurement process is sufficiently defined by contract signing. We would recommend that the O&M contractor is allowed two months after award to mobilise its equipment and workforce. This allows four months for procurement. We suggest two months preparation, one month bidding and one month selection

Supply chain capabilities

There is the option of either negotiating directly with VMS, or awarding through open competitive bid procurement. There are currently a limited number of companies who have the

capability of carrying out a full highway maintenance contract. We are aware of only three: VMS of Virginia, Jorgensen of Maryland and Tennessee based ICA.

A number of other local companies could carry out a number of individual tasks such as sweeping, mowing, guardrail replacement etc. but would not have the expertise required to carry out more specialised maintenance to structures and pavement.

Performance package

The performance requirements table presented in Attachment A to Exhibit H is similar to that included in the VDOT (I-64) model. It is confirmed that Attachment A will be used in the maintenance contract as the tolerance and performance criteria are more closely defined than in the I-64 document including some time limits on the rectification of defects. The times specified to rectify defects varies according to asset class but it is noted that there are a number of timescales that we consider to be onerous on the Operator and therefore could be a source of increased cost in the maintenance contract. This is particularly the case where the performance criteria require significant maintenance activity such as substantial repair of culverts but allow only 30 days to schedule, organise and implement the repairs, even where there is no safety issue. This will lead to higher costs as the maintenance contractor will not be able to schedule maintenance activities efficiently.

Market testing

Long term maintenance contracts have many benefits that can lead to better value, including the opportunity to write off maintenance equipment over the contract period, a reduction in repeat tendering costs, improvement in service delivery with time. However, it is prudent to allow periodic testing of the service and costs to ensure that potential benefits are being realised and to prevent complacency from the incumbent contractor. This is often achieved through an initial contract period with the option for contract extension through mutual agreement dependent on satisfactory performance, and tested by benchmarking other toll road maintenance out-turns. It is recommended that the Operator include optional extensions to the standard maintenance contract term to both encourage good performance and to allow re-tendering of the contract if the cost and value of the work is questionable.

9 Richmond Airport Connector overview

9.1 Introduction

The RAC is a proposed 1.6-mile roadway that will connect the Parkway from one-third of a mile west of Monahan Road to Airport Drive near its intersection with Charles City Road in Henrico County. The four-lane, limited access roadway will provide a direct connection from Route 895 to Richmond International Airport. This will reduce the amount of time motorists need to get to the airport when travelling from Chesterfield County and the Petersburg area. It will also relieve congestion on Laburnum Avenue and enhance economic development in Eastern Henrico.

The construction of the RAC has always been contemplated by the Department, which had allocated funds towards its development, a portion of which has already been spent in acquiring the necessary right of way, completing design and obtaining environmental clearance. Currently the Department has insufficient funds to complete the RAC and therefore sees considerable merit in TUSA's offer to construct the RAC. The ARCA obligates T895 to build the RAC if TIFIA funding is available.

Construction & Construction Contract

TUSA is required to run a competitive and transparent procurement process that VDOT will oversee to select a construction contractor who will build the RAC under a fixed-price, date-certain contract. The intent of the Construction Contract is to pass all construction risk assumed by the Operator under the Amended and Restated Comprehensive Agreement through to the Construction Contractor. The Construction Contractor will be required to provide a market standard security package supporting its construction obligations such as performance and labor and material bonds, liquidated damages, cash retainage, latent defect warranty periods etc. VDOT's preliminary cost estimate, including Department oversight and an owner's contingency, is approximately \$50 million, but under the ARCA TUSA's financial liability is limited to \$45.2 million inclusive of right-of-way acquisition costs. TIFIA funding will cover 100% of the RAC construction costs.

Design

To date approximately 85 – 90% of the required designs for the RAC have been completed. The completed designs have been signed off by FD/MK. VDOT have completed an initial review of the designs including general alignment and geometric requirements and has issued approval in principal of structures and other basic design issues. The drawings are not signed off for construction. The designs are satisfactory for cost estimating and permitting purposes. The designs have been reviewed and no significant issues of concern have been highlighted.

The four bridge plans, B602 – Widening Rt. 895 EBL over Monahan Road, B603 – Airport Connector over Rt. 895, B604 – Airport Connector over Sprouse Road, and B605 – Airport Connector over CSX RR all appear to complete and provide the required vertical and horizontal clearances for the crossed roadway or railroad.

Structure	Vertical Clearance	Horizontal Clearance
B-602 over Monahan Road	6.044m	
B-603 over Rt.895	5.174m	
B-604 over Sprouse Road	5.053m	
B-605 over CSX Railroad	7.090m	7.819m and 12.551m to Pier 1 and Pier 2 respectively (7.62 required by AREA)

The General Notes shown on the plans for the above noted bridges show the design capacity as "MS 18 loading and alternate military loading" which is the standard AASHTO loading requirement for road bridges of this type. The design specification is shown as the AASHTO 1996 edition with Interims and VDOT modifications. The design calculations were not available for review. The details for the substructure and superstructure as shown on the plans for the bridges are typical for bridges of the lengths and widths of the Airport Connector bridges.

Right of Way

Of the 30 parcels of land required for the RAC, the Department, at its own cost, has completed all land acquisition but not all titles have transferred as of the current date. The title transfers are expected to be complete by April 2006.

A purchase agreement has been reached and a contract signed on the parcel of land occupied by Southern Graphics. Southern Graphics is required to de-contaminate the ground after VDOT have demolished the structures on the land. Title transfer is expected in April 2006. This issue is described in detail in the "environmental issues" section below.

Technical Support Agreement

The Technical Support Agreement ("TSA") with Transurban will help ensure that suitably qualified and experienced staff oversee the proper and safe construction of the RAC.

9.2 Environmental Impact Statement RAC

An Environmental Assessment ("EA") was prepared for the Airport Connector in December 2001 prepared by VA Geotechnical Services (9/24/2001). While the state environmental review process was satisfied in May 2001, FWHA and VDOT did not approve the EA. Federal Funds may be provided for the Airport connector in the form of TIFIA loans. Therefore, an Environmental Assessment is currently being completed by VDOT to satisfy federal requirements. The expected completion date of the EA is June 2006.

There is a possibility that the EA may result in the need for an EIS. This determination will be made by FWHA after they review the EA.

9.3 RAC Wetlands Permit

Wetlands Studies and Solutions, Inc completed wetlands permit applications for the Pocahontas Parkway (Route 895) and the Richmond Airport Connector. The studies that they completed were commissioned by FD/MK and satisfied the requirements of Virginia Marine Resources Council, Virginia Department of Environmental Quality, and the Army Corps of Engineers.

The mitigation site was designed and constructed to satisfy the requirements for wetland replacement for the Parkway and the RAC. The environmental permitting for the RAC required a 2:1 ratio of wetlands compensation to impact. The wetland mitigation was completed in conjunction with the mitigation for the Parkway. It was done outside the ROW and the 70-acre wetland site at Turkey Run constructed as part of the mainline I-895 appears to be large enough to accommodate the area required by the 2:1 compensation to impact ratio as confirmed in the letters agreeing to the changes to the permit from DEQ February 17th, 2005 and COE June 3rd, 2003.

According to documentation from the DEQ, mitigation and monitoring requirements are complete for the RAC.

All wetland impact has been mitigated and construction can begin according to the VMRC, VDEQ, and ACOE. However, the original permit from the Corps of Engineers dated November 2001 states that the works must be completed by December 1, 2006. An extension of the permit will be required. VDOT believe that getting an extension on the wetlands permits expected to expire is a relatively simple procedure that is a formality. Whilst we agree that this should not present a problem there is a possibility that the Corps might require an update of the permitting obligations. This is a small risk and VDOT assumes responsibility for construction delays in obtaining regulatory approvals under the terms of the ARCA.

9.4 Environmental Issues – Southern Graphics

The parcel occupied by Southern Graphics lies in the RAC right of way. Two Phase I and Phase II environmental assessments completed on the site identified impacted soil and groundwater. A June 25, 2003 report prepared by Virginia Geotechnical Services indicates that two groundwater samples exceed VADEQ risk based screening levels for arsenic, chromium and lead. A further

report of August 22, 2003 prepared by Virginia Geotechnical Services indicates one groundwater sample exceeds VADEQ risk based screening levels for arsenic and lead.

The buildings and associated land contain pipe work and tanks used for chrome plating and copper plating. The Phase II assessments did not evaluate the soil under the pipe work or tanks. The Chromium found was analyzed as a RCRA metal. This test does not distinguish what form the chromium is in (trivalent or hexavalent) but is an assessment of the amount of Chromium that will leach out of a sample when exposed to acid rain.

VDOT have entered an agreement with Southern Graphic System, Inc whereby on purchasing the property (closing date April 1, 2006) VDOT will be responsible for removing buildings on the site and Southern Graphics will be responsible for the remediation of contaminated ground. However, there are no timescales associated with the agreements apart from the requirement on Southern Graphics to propose a remediation schedule. VDOT has accepted liability for pre-existing contamination and TUSA have confirmed that Virginia's Department of Environmental Quality (VDEQ) will oversee the decommissioning of the Southern Graphics facility and will require soil sampling under the removed tank and pipe fixtures. VDEQ will require full testing and VDOT is responsible for all costs and any delays due to environmental contamination as long as TUSA do not exacerbate the situation

A number of issues present themselves with respect to the indemnifications offered by the current agreements, but are mitigated as described:

- The timing of the assessment & remediation efforts (for which Southern Graphics is responsible under the purchase agreement with VDOT) could be lengthy given the likely contaminant (hexavalent Chromium), the shallow groundwater in the area, and the properties that Chromium +VI exhibits in groundwater (it moves very quickly so the plume could be very large). A lengthy series of investigations could delay the development of the RAC, but delays in remedial investigations or activity that impact construction are the responsibility of VDOT under the terms of the ARCA.
- The cost of removing & disposing impacted soil that will be encountered during construction could fall to Transurban as the problem will be deemed to be exacerbated by the construction activities wholly or partially voiding any indemnifications. Soil disposal costs could be high depending on the volume of soil needing to be removed, how contaminated it is, and how far away it needs to be taken if it's classified as a hazardous waste. It's impossible to estimate a volume of soil or disposal costs at this stage because has been no meaningful subsurface investigation yet. Separating and stockpiling contaminated soil during construction slows earthworks considerably. TUSA advise that VDOT have agreed to be the Hazardous Materials generator on record for the disposal of contaminated soil and groundwater generated during construction activities.
- The RAC may need to be redesigned to avoid groundwater contamination. If the groundwater is contaminated with Cr(VI) then the construction should avoid piling

through it. A design review will be required once more is known about the condition of the groundwater. VDOT is responsible for any costs in excess of \$45.2m per the ARCA.

9.5**Wilton Farms**

Wilton Farms is a private development of 3,209 residential units on 1,185 acres undertaken by HH Hunt Corp alongside the James River and the Parkway. The Henrico County Board of Supervisors unanimously approved the development proposal in January 2005. The Commonwealth Transportation Board (CTB) approved a limited access road from the Wilton Farm development to the Parkway in December 2001. Once fully constructed, the WF development will provide 35% of traffic. Transurban is assuming that the WF Developer will finance and build the access roads / ramps. With the CTB approvals the Developer has initiated negotiations with TUSA in relation to the access ramp design, tolling and construction traffic management. Construction is anticipated to commence in June 2006.

No comment can be made on the technical aspects of the intersection that is planned as final drawings are not yet available at the time of writing the report.

10 Financial model

10.1 Status

The Financial Model has been developed and the review team has reviewed the inputs relating to operations and maintenance costs. Comments made in this section relate to the financial model dated May 26, 2006. The model has been reviewed for consistency with the due diligence conclusions and is consistent with the supporting evidence provided to the team and reviewed in this report..

10.2 O&M cost model feed to financial model

There is insufficient detail in the build up of the O&M rates to carry out detailed sensitivity analysis of the O&M cost model feed. However the costs allowed for are broadly in line with other toll road facilities around the country as described in Section 8.3. We note that the O&M costs increase with the consumer price index and that capital expenditures are programmed based on the assumed and reasonable assumptions relating to life cycle estimates.

Cost risk

The overall allowance for O&M costs has been built up with reference to the current costs incurred by PPA in operating the Project Road. It would appear that sufficient funds have been made available to cover the routine maintenance and operations. The cost allowed is a significant increase on the sum expended by VDOT but this reflects the relatively low level of maintenance required by a new facility. The routine maintenance costs do not represent a significant risk as there is scope to improve on current performance through the application of planned maintenance through the asset management plan.

Major maintenance costs have been applied as detailed in the supporting evidence discussed in Section 8.3. There is an increase in major maintenance costs of 50% allowed after year 50 which is intended to cover the cost of pavement replacement and other elements that may reach the end of their serviceable life in the later years of the term. The major maintenance costs are more at risk due to the high value major structures associated with the James River and the I-95 interchange with low probability but high consequence defects having the potential to skew the maintenance cost profile. To mitigate this risk VDOT are named as insurer of last resort in the ARCA taking responsibility for uninsured repairs over 15% of the replacement cost of the James River Bridge and the Sponsor is required to insure against loss of revenue for up to 1 year. This risk has been considered for mitigation through insurance by TUSA.

Sensitivity

Sensitivity analysis has not been carried out as the team has not seen a breakdown of the costs. The overall figures and assumptions for cost and budgeting provided by TUSA have been

tested by comparison against other toll roads (average cost per lane mile, etc). TUSA confirms that O&M costs and contracts will be made available to the lenders' technical and legal advisors for independent review.

10.3 RAC construction costs

Construction of the RAC has not been considered in the scenario reviewed in the financial model.

Appendix A – Proposed Scope of Work

Proposed Scope of Work

The role of the Consultant is to provide a technical review and advice to the Lenders to the Project in support of the financing for the acquisition of the Pocahontas Parkway.

Areas to be reviewed include:

- principal risks;
- engineering;
- development feasibility;
- operation and maintenance costs estimates;
- major maintenance cost estimates;
- environmental compliance; and
- the technical provisions in the principal project contracts and permits. (Note: the review will be limited to either such contracts and permits as are existing and will remain in full force after the acquisition or those that shall be drafted during the term of the Consultant's assignment. For the avoidance of doubt, the Consultant shall only be required to review one set of contracts and permits as instructed by the Client.)

Technical Report

The Consultant will prepare a Technical Report, which will summarize its review of the existing Project information, and advise of any areas of concern or which appear technically incorrect, abnormal, or inconsistent with the Lenders to the Project's understanding of the Project. The Technical Report will analyse all the risks related to operation & maintenance and major maintenance of the Project and will address, *inter alia*, the items discussed below:

1. The Consultant Project Inspection

The Consultant will be required to undertake a desktop study of inspection reports of the Pocahontas Parkway and identify any major equipment component or system design feature that does not appear to meet design, performance or operating requirements, or fails to adhere to good engineering practice. The Consultant will also be required to visit and familiarize itself with the Project facilities. The part of the report should address, *inter alia*, the following:

- a) The Project site condition with particularly focus on the environmental conditions of the site (including risk of contaminated land);
- b) Pavement, drainage, roadside furniture and related materials and all structures *inter alia*: over and under bridges, toll plaza (including canopy) and Project office, interchanges, retaining walls, sound walls, drainage, separation barriers, side barriers, lighting, road markings, signal lights, etc.;
- c) Review any operating systems prepared by Transurban's such as traffic violation equipment (closed circuit cameras, barriers etc.);
- d) Review of any contracts or permits currently in existence, notably any construction and operating contracts (including warranties), contracts with local utilities or land owners;
- e) Adequacy of Right-of-way ("ROW) for possible future Project expansion (i.e. lane widenings etc.); and

- f) Review of the records of accidents on the Pocahontas Parkway. The Consultant should make recommendations as to likely modifications that may be required including an estimate of costs so as to ensure that the Pocahontas Parkway can meet the design and performance requirements, long-term availability, quality criteria and anticipated performance degradation over the term of the Project agreements.

2. Operation and Maintenance (O&M) & Major Maintenance ("MM") Review

2.1. The Consultant will be required to review and comment on the Transurban's proposed O&M and MM programme including toll operating requirements. Their report should specifically focus, *inter alia*, on the following:

- a) Cost and budgeting assumptions;
- b) Frequency of routine O&M and MM taking into consideration current road conditions, estimated traffic volume (both passenger and commercial vehicles) and weather conditions pertaining to this specific project;
- c) MM procurement methods and contracts;
- d) MM reserve accounts and timeliness of funding them;
- e) Experience of O&M and MM management staff (or of subcontractors if applicable);
- f) O&M staffing requirements (or of subcontractors if applicable);
- g) O&M staff training programmes (or of subcontractors if applicable);
- h) Ability to manage lane disruptions so as to minimize the effect on road users and Project revenue during periods of O&M or MM;
- i) Health and Safety and QA requirements (or subcontractors if applicable);
- j) Review the extent to which each major equipment component or technological procedure for the operations of the Project has been operating commercially under similar conditions and comment as to the anticipated impact of limited operating experience on project performance;
- k) Review and comment on the overall robustness of the O&M and MM costs and the maximum likely cost overruns;
- l) Review any interface agreements between the O&M and MM subcontractors (if applicable).

3. Documentation

The Consultant will be required to evaluate the overall consistency of the project documentation for the purpose of identifying missing, inconsistent or unresolved information. Specifically, the Consultant will review and comment on:

- a) The consistency and compatibility of the various provisions within each of the Project contracts and subcontracts;
- b) The risk allocation relative to international practice for similar road projects;
- c) Conformance of all contracts with "good engineering practice";
- d) Compliance of construction, O&M or MM with the Project and financing agreements (including confirming conditions precedent to drawdowns under the financing documents if applicable).

4. Financial Model

The Consultant shall assist the Financial Advisor in developing the financial model regarding any aspects of the technical due diligence, including providing advice and comments on the relevant

sensitivities to be included in the model. The Consultant shall be required to review the final version of the financial model for consistency with its due diligence conclusions.

5. Miscellaneous

5.1 The Consultant shall be requested to provide its opinion regarding the development of additional structures which may be undertaken by Transurban such as:

- a) The construction and operation of a ramp connecting to 1-95; and
- b) The construction of connections with the Wilton Farm real estate development project in the vicinity of the Pocahontas Parkway (which currently encompasses the construction of an urban community with more than 3,000 houses, apartment and town houses to be built within the next 15 years).

5.2 The Consultant may be required to provide other assistance as reasonably requested by the Lenders to the Project consistent with the fee proposal.

6. Outline Design for Richmond Airport Connector ("RAC");

Transurban is in the process of analyzing the feasibility of constructing a 1.6 mile four-lane connector road from the Pocahontas Parkway west of Monaghan Road to extend north to the South Airport Drive linking the Pocahontas Parkway with Richmond International Airport (a "Project Enhancement" or the "RAC Project Enhancement"). The estimated cost of this Project Enhancement is between \$30 - \$35m, which if carried out, will be undertaken under a fixed price, date certain EPC contract with a contractor selected by Transurban (the "RAC Contractor"). The Consultant will carry out the following duties in Phase 1:

- a) Review the outline design and comment on any technical issues that might affect the feasibility of the project enhancement and its ongoing operation and maintenance;
- b) Review the right of way (ROW) drawings and clarify any outstanding issues of land purchase including the possibility of contaminated land. right of way drawings;
- c) Review and confirm compliancy with all required Government Approvals to date (e.g. permits, environmental approvals and licences for the work);
- d) Review the design with respect to the available ROW;

Appendix B – Risk Identification

Risk Register: Risk Identification

Title: Pocahontas Parkway Acquisition - Addendum to Final Report

Final Report reference number and risk description		Risk elimination or mitigation measures	
No	Detail or effect	Action recommended by Halcrow	Transurban Response
1.	1.1 Leaching of trench fill, as one cause for dipping of carriageway.	Permitting requirements have been met. Not a significant technical defect to correct and pre-existing contamination of adjacent land emanating from project land is a VDOT risk unless TUSA is negligent. AMP procedures for monitoring and rectification are essential.	These issues will be monitored and incorporated into the AMP.
2.	1.2 Principal Risks: Premature failure of major structure elements (tendon anchors etc.)	Risk of uninsurable Catastrophic Bridge Failure (ARCA Article 14) considered by TUSA. However, a tendon anchor and bridge bearing repair, etc is not necessarily catastrophic but may have a significant impact on the revenue stream due to closure of lanes.	The process as recommended will be incorporated into the AMP. MM contractors will not be allowed to undertake any work unless appropriate guarantees/bonding/LOs are first presented. These requirements will include guarantees for performance that will be detailed in the AMP. Performance guarantees are typical for MM work in Virginia.
3.	1.2 Principal Risks: Polluted run-off to watercourses	TUSA have given assurances that they will mitigate hazmat spillage risk through fitting positive drainage to James River Bridge and a contingency plan for rapid hazmat team response and repairs.	A mitigation and prevention plan will be developed by T895 and approved by VDOT. They will be incorporated into the AMP as Halcrow describes.
4.	1.2 Principal Risks Buried pipes containing acids and petroleum	Leak causing damage to the bridge foundations	TUSA will finalise the O&M contract during the transition period (6 months) which will enable us to improve prices and also develop the AMP with the prospective O&M contractor to include inspection of the pipelines along the western side of the bridge. Orrick states that: The pipe situation would constitute a pre-existing hazard to the extent there has been leakage in the pipes in noncompliance with environmental laws that has occurred prior to the closing date and has not been exacerbated by the Operator. The Operator will undertake regular inspections.
5.	1.2 Principal Risks Major accident on the main river bridge or high level interchange with I-95	Closure of bridge for long periods	The AMP will include a contingency plan with traffic management as recommended.
6.	2.3 Final version of ARCA not seen as still issues under negotiation	Effects of change unknown	TUSA and Orrick are of the opinion that the technical risk allocation has not and will not be changed, but the IE will be asked to verify this once the finalized ARCA is executed. The most recent version of the ARCA was issued on April 24, 2006. This version and any subsequent versions will be made available to lenders & advisors.
7.	2.3 O&M Contract not yet finalized	Terms and conditions unknown	The O&M Contract will be reviewed by the lenders' IE and will be compliant with the ARCA.

Risk Register: Risk Identification

Title: Pocahontas Parkway Acquisition - Addendum to Final Report

Final Report reference number and risk description		Risk elimination or mitigation measures	
No	Detail or effect	Action recommended by Halcrow	Transurban Response
8. 2.3 & 8.3 Outline AMP not tailored to specific conditions relevant to Pocahontas Parkway	Outline AMP not detailed	<p>It is recommended that the legal advisors comment on our suggestion that the final AMP is independently reviewed and subject to amendment and approval of the lenders' under the financing agreement.</p>	<p>Under the terms of the ARCA, T895 is required to develop a series of plans and reports which must be acceptable to VDOT. The management plans required under Exhibit H of the ARCA must be prepared for VDOT's approval no later than 60 days before the end of the transition period. Failure to produce these plans and reports in a form and content acceptable to VDOT (such approvals not to be unreasonably withheld) may result in an Operator Default, subject to appropriate cure periods. All of these plans will be reviewed by the lenders' IE. The Plans listed below are collectively referred to as the Asset Management Plan and include:</p> <ul style="list-style-type: none"> • Permit Processing Plan • Management Plan • Maintenance Plan • Inspection Plan • Incident Response Plan • Traffic Control Plan • Customer Service/Response Plan • Public Information Plan • Environmental Protection Plan • Quality Assurance and Quality Control Plan • Detour Plan • O&M Manual <p>The Reports include:</p> <ul style="list-style-type: none"> • Quarterly Reports • Annual Reports • Pre-Transfer Assessment Report <p>TUSA confirms that the AMP will be made available to the lenders' technical and legal advisors for comment.</p>
9. 3.2 Not all information provided on the design drawings	Uncertainty	Further visits to VDOT archives allowed review of the design submissions for the two construction contracts that formed the 1895 Design and Build contract.	Closed
10. 3.2 No Final Construction report Issued	Quality	Copies of final inspection reports have been seen and construction warranties cover repair of minor faults. D&B contract QA/QC program considered robust with no evidence to suggest there are outstanding quality issues. VDOT to ensure that warranties by the D/B contractor are extended to the Operator.	Orrick state: The consent of the Design Builder is expected to be obtained as this is a requirement under the DBC.
11. 3.3 It is understood that TUSA will develop project specific O&M requirements during the transition period of six months for handover of O&M responsibilities	O&M requirements unknown	It is recommended that the these requirements are submitted to the lenders and independently audited for technical compliance against acceptable industry standards.	Agree
12. 4.1 Increase in demand compared with forecast traffic levels would not appear to pose any significant problems	Could increase the incidence of carriageway dipping and the need for earlier rectification and some carriageway down time.	Not a material issue. Rectification may be scheduled outside peak hours to minimise the impact on revenue while repair costs should not be significant. AMP should detail maintenance inspection regime and procedures.	Noted

Risk Register: Risk Identification

Title: Pocahontas Parkway Acquisition - Addendum to Final Report

Final Report reference number and risk description		Risk elimination or mitigation measures	
No	Detail or effect	Action recommended by Halcrow	Transurban Response
13.	4.4 & 4.10 The toll plaza tunnel was clean and dry with some minor vertical hairline cracks and a small horizontal hairline crack.	Possible growth in cracks. The VDOT Assistant Resident Engineer confirmed that he inspects the tunnel and cracks on a regular basis and that there is no apparent growth in the cracks. It is our opinion that the cracks are minor and are normal for this type of structure.	Closed
14.	4.4 The former silt basins for erosion control possibly converted to storm water detention basins	Plans not available for review at time of writing The I-895 plans have now been reviewed and drainage outlets flow through silt basins.	Closed
15.	4.4 Washout and minor slippage to both cutting and embankment slopes would appear to be due to the lack of topsoil in the finishing of the earthworks	Hindering establishment of vegetation and allowing water to penetrate. It is recommended that the AMP include measures to re-establish vegetation growth and prevent further erosion.	This recommendation will be incorporated into the AMP.
16.	4.5 & 8.3 The service life of bridge bearings on the high level interchange and access for replacement has not been assessed	Could represent a significant cost if replacement is needed ahead of the estimated 40-50 years.	TUSA confirms that sufficient costs have been budgeted to allow for access needed to replace these critical bridge components.
17.	4.5 & 4.10 The reduced design speed for the ramp from Route 895 westbound to I 95 northbound	Below the lower limit of acceptable design parameters.	Noted. This recommendation will be considered in consultation with VDOT.
18.	4.5 Groundwater contamination and residual risk of contamination of groundwater from pile insertion	Environmental concern Monitoring reports suggest no contamination has occurred. VDOT has indemnified TUSA for pre-existing environmental conditions.	Closed
19.	4.5 Expansion of the EBL of Route 895 over Monahan Road	Required for the future construction of Ramp B of the Airport Connector.	The RAC design has made allowances for this expansion. Closed
20.	4.6 A number of guardrail strikes were noted in a drive-through of the road.	It is not known what the recovery rate is for minor infrastructure-damage-only accidents. By their nature these accidents are difficult to track and are often unreported. Allowance should be made for regular repairs to guardrail in the O&M costs.	Minor guardrail damage is not a significant cost issue. It is suggested that the AMP should detail the cost recovery process from a delinquent road user's insurance. This recommendation will be incorporated into the AMP.
21.	4.8 Specific warranties for the design build have not been seen.	Risk of money spent unnecessarily in repairing warranted items	General warranties under the D&B contract will be transferred. No material risk but opportunity for cost saving for defect rectification as some manufacturers warranties might have longer terms than general warranties. It is suggested that TUSA investigate availability of warranties for bearings, joints, lamp columns etc. This recommendation will be followed during the transitional period.

Risk Register: Risk Identification
Title: Pocahontas Parkway Acquisition - Addendum to Final Report

Final Report reference number and risk description		Risk elimination or mitigation measures	
No	Detail or effect	Action recommended by Halcrow	Transurban Response
22.	4.8 There are a number of low probability but potentially significant defects that should be allowed for in contingency planning and in insurance considerations	Might lead to the need for early replacement of pre-stressing tendons in the James River Bridge, early replacement of high level bearing assemblies or similar activities.	TUSA have given assurances that all appropriate insurance coverages will be obtained and are readily available in the market. Federal bridge inspection requirements will apply. VDOT insurer of last resort for force majeure. As noted previously, the AMP should include the process for monitoring and inspection to allow early detection of potential problems.
23.	4.8 The only outstanding issue highlighted is the transfer of grant of license to VDOT to use source codes for proprietary computer software for the operation of the ETTM system ("Source Code") and the associated Escrow agreement.	The matter will be subject of final ARCA agreement.	TUSA required to confirm that access to source codes has been negotiated.
24.	4.10 Earthquakes over 5	There is a slight risk of slippage of embankments and cut slopes with the possibility of affecting trafficked lanes.	The AMP should detail the process under contingency planning for this eventuality.
25.	4.10 Transurban are to fit a positive drainage system to the James River Bridge.	There is still a risk that freezing of the pipe work in low temperatures would cause temporary drainage problems on the deck.	It is suggested the freezing risk could be mitigated by removing snow from the carriageway before any thaw. The use of magnesium chloride as a de-icing material on the bridge would reduce the risk of pollution from run-off following de-icing operations. The AMP should describe measures to maintain the deck drainage.
26.	4.10 The VDOT ETC clearing house agreement addresses such issues as: recompense for loss of revenue for PPA if VDOT fails to provide the service; reconciliation of accounts; and future upgrades by either party; etc	Merits close examination by TUSA prior to signature to ensure all risks are correctly allocated and manageable procedures are in place.	TUSA legal advisors to confirm acceptability of terms.
27.	4.10 Assumption that Wilton Farm access to I-895 is to be paid for by the Estate developer	Assumption not realised	TUSA has confirmed that access is to be paid for by the Wilton Farm Estate developer. It is recommended the AMP identify procedures for the developer to coordinate with TUSA to schedule the works and agree reasonable lane closures.
28.	5.1 Exhibit F: Toll Revenues. The exhibit appears workable	No implied conclusive evidence	The exhibit is workable
29.	5.1 Exhibit F: There are warranties from the constructors of the Facility.	The ARCA intent is to transfer the benefits of these to the Operator. However this requires the issuer of such warranties to formally consent. Warranties or any such consent not seen	TUSA to confirm that warranties have been transferred.
		Orrick state: The consent of the Design Builder is expected to be obtained as this is a requirement under the DBC.	

Risk Register: Risk Identification

Title: Pocahontas Parkway Acquisition - Addendum to Final Report

Final Report reference number and risk description		Risk elimination or mitigation measures	
No	Detail or effect	Action recommended by Halcrow	Transurban Response
30.	5.1 Article 4 & 9 Apart from the RAC land acquisition matter there are no surprises in this first part of the ARCA.	Implied risk with RAC land acquisition Cost of Airport Connector construction and land acquisition is capped at \$45.2 and only goes ahead as TUSA's project if TIFA funding is available.	Closed
31.	5.1 Article 8 The 5 year assessment appears to be the forecast of planned capital replacement under the Asset Management Plan. To call it extraordinary implies unforeseen, and if unforeseen cannot be planned.	Assuming this interpretation is correct then the Reserve will be 110% of forecast, funded up front in each 5 year period, adjusted by actual expenditure as work proceeds. We understand that the terms relating to provisions for the EMRR will be updated in the executed ARCA although confirmation will be required. "The ARCA defines Extraordinary Maintenance and Repair Work as: "...maintenance, repair, renewal, reconstruction or replacement of any portion or component of the Project of a type which is not normally included as an annually recurring cost in the Operator's roadway maintenance and repair budgets..." "This is planned major maintenance. Confirmation required from TUSA that the ARCA terms and conditions have not changed from March 3 version."	TUSA is of the opinion that the technical risk allocation has not and will not be changed, but the IE will be asked to verify this once the finalized ARCA is executed.
32.	5.1 Article 10 The Department has the right and obligation, without liability, to oversee the RAC (as a project Enhancement) and all and any thing else, at cost plus; save Ordinary O&M for which a US\$ 50,000 per annum cap applies.	This is not unusual in principle, but doing so at the Operator's cost is. Usually the Operator would pay only for found default, not for found compliance. But then it's in the terms it can be priced.	Closed
33.	5.1 Article 14 A reasonably standard definition is included	Cost of Airport Connector construction and land acquisition is capped at \$45.2 and only goes ahead as Sponsor's project if TIFA funding is available. All operator costs and cost of Independent Engineer is included. Legal advisor to comment on appropriateness of exclusion.	Lenders are referred by Orrick to Article 14 (delay events and force majeure) and Section 13.05 (discriminatory governmental action).
34.	5.1 Exhibit H The Department has the authority to remove Operator staff from the Project.	Where does that decision making authority reside in the Department? Legal advisor to confirm whether that authority rests at highest level within VDOT	Orrick states: Exhibit H (Section 1.E.) states the following: "If the Department determines, in its sole discretion, that the onsite project manager or any other Person employed by the Operator or the O&M Contractor is not performing the services properly and skillfully, or who is otherwise incompatible with a good working environment and the success of the Project, then the Department shall so inform the Operator of the reasons for its conclusion and the Operator shall use its best efforts, consistent with applicable Laws and Regulatory Approvals, to replace such Person." Under this language, VDOT only has the right to cause the Operator to use its best efforts to replace an employee, and only for cause. It does not give VDOT the right to unilaterally terminate any employee of the Operator. VDOT's specific right is consistent with its rights and interests in the Project generally as set forth in the ARCA, but the document is silent with regard to where in the organization the decision-making authority resides.
35.	5.1 Exhibit H Section III - A page 13 the environmental plan requires the Operator to mitigate noise impacts after consultation with the public.	This needs to be explained in more detail. No mitigation should be required unless the project is expanded or a different surfacing material is used. Confirmation is required from TUSA and VDOT that noise mitigation is not required unless Operator makes changes that impact on existing and currently predicted noise levels.	TUSA confirm language will be included in the O&M Exhibit to clarify that the noise requirement refers only to instances where "noisy roadworks" are planned for nighttime working.

Risk Register: Risk Identification

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Final Report reference number and risk description		Risk elimination or mitigation measures	
No	Detail or effect	Action recommended by Halcrow	Transurban Response
36.	5.1 Exhibit H Section III-B states different response times for emergencies in and out of work hours	Does not explain when work hours are. It requires the Operator to arrive on site with 'necessary manpower' which is pretty open ended. Have Transurban tied this down?	Not a material issue but has potential to increase cost of providing incident support. The AMP should define the required procedures, manpower and working hours in such detail to ensure they become contractual and avoid VDOT intervention.
37.	5.1 Exhibit H Section III-D requires lane closures to take place at night where possible.	Given the low volume of traffic and the inherently unsafe nature of night time working I would try to have this clause amended or removed.	This recommendation will be incorporated into the AMP.
38.	5.1 Exhibit H The criteria for snow and ice control requires that all pavement travel lanes are kept open free of frozen precipitation (snow and ice) throughout the incident weather occurrence.	This requirement is onerous and will rely on the judgment of the Inspector.	In practice TUSA will only be required to meet similar performance as the roads that feed into the project road, which VDOT will be clearing.
39.	6.2 Grant of license to VDOT to use source codes for proprietary computer software for the operation of the ETIM system ("Source Code") not known	Agreement has not been provided	Refer to Item 23 above.
40.	6.3 The outline organizational structure shows a general manager supported by an office manager and an operations manager.	It is not clear on the support staffing levels.	The overall budget for support staff is not unreasonable so in our opinion it is not considered a significant risk.
41.	7.3 Potentially hazardous materials are being conveyed through the pipelines, including sulfuric acid, an unspecified weak acid and petroleum.	Any leakage from the pipes represents a risk to the foundations of the bridge.	There will need to be regular inspections of the pipes to ensure that any leaks are found quickly and remedial works are carried out. Refer to Item 4 above.
42.	8.3 We have not been able to review how risks such as major weather events, geotechnical risks, or major accidents causing substantial damage to the infrastructure will be dealt with.	If for example one of the bridges across the James River needs to be closed, what effect does this have on revenue and how will it be mitigated? Whilst some scenarios will be highly unlikely they could have a significant effect if they do materialise	TUSA will develop the AMP with the prospective O&M contractor to include inspection and monitoring of the pipelines along the western side of the bridge. Orrick states that: The pipe situation would constitute a pre-existing hazard to the extent there has been leakage in the pipes in non-compliance with environmental laws that has occurred prior to the closing date and has not been exacerbated by the Operator. The Operator will undertake regular inspections.
43.	8.3 The Asset Management Plan must contain details of how the facility will be managed during severe weather events in the future.	Contents of AMP unknown	The AMP should include procedures for dealing with these types of risk events to mitigate their effect.
		This risk is not significant but requires the AMP to detail procedures to be implemented during outbreaks of severe weather.	This recommendation will be incorporated into the AMP.

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No	Detail or effect	Action recommended by Halcrow	Transurban Response
44.	8.3 No structural repair of pavement allowed for at 30-40 years	Implied risk to pavement	Closed
45.	8.3 The period of the concession is 99 years.	In this case allowance must be made for reconstruction of the road pavement and replacement of the bridge bearings and joints	Closed
46.	8.3 Maintenance of the piped drainage underneath embankments	Could entail some expense if major repairs are required.	TUSA will develop the AMP with the prospective O&M contractor to include inspection and maintenance of piped drainage.
47.	8.3 Tolling equipment O&M – a base cost of \$227,000 is based on existing PPA figures, presumably based on the existing service provided by InTrans	The Sponsor is escalating these costs in line with industry indices; these do not allow for increases in traffic flows.	Closed
48.	8.3 The Sponsor has allocated the sum of \$1,000,000 for an upfront upgrade of the video enforcement system (VES).	This is based on VDOT's own estimate of \$800,000, escalated to cover project management and contingency.	Closed
49.	8.3 It was noted that during an ice storm in the winter of 2003-4 ice formed on the outside of the bridge parapets and then fell onto the running lanes of I-95 during the thaw.	Risk of a recurring event.	This recommendation will be incorporated into the AMP.
50.	8.3 Initial comments on the financial model are that the traffic and revenues are forecast to increase steadily over the concession period but that the O&M costs, including the capital reserve, are constant over the same period.	Inconsistency between traffic growth and maintenance	Closed
51.	8.3 The Operator is required to submit to the Department the life cycle asset maintenance model for the Project prior to the Agreement Date.	Exhibit not provided	TUSA confirms that this exhibit will be reviewed by the lenders' technical and legal advisors.
52.	8.3 Risk allowance not included with major maintenance cost forecast.	It is difficult to assess the allowance made for extraordinary maintenance that might be required should an element fail prematurely.	TUSA confirms that this exhibit will be reviewed by the lenders' technical and legal advisors.

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53.	8.4 We assume that Attachment A will be used in the maintenance contract	Assumption not validated We recommend that Attachment A be used in the maintenance contract.	Attachment A will be used in the maintenance contract.
54.	9.3 VDOT believe that getting an extension on the wetlands permits expected to expire is a relatively simple procedure that is a formality.	Whilst we agree that this should not present a problem there is a possibility that the Corps might require an update of the permitting obligations	Closed
55.	9.4 The agreement between VDOT and Southern Graphics alone does not appear to sufficiently protect Transurban from liability.	For example, the agreement does not require Southern Graphics to sample soil under the removed tank & pipe fixtures	Closed
56.	10.1 The final model and its assumptions have not been reviewed as part of this report	Final assumptions and costs unknown	Closed
57.	10.2 It is recommended that insurances taken out by the Sponsor cover major repairs due to material defects such as tendon corrosion or concrete anchor point cracking.	Insurance provisions unknown We have no confirmation that this risk has been considered for mitigation through insurance by TUSA.	These issues have been considered in developing the insurance program.
58.	10.2 Sensitivity analysis has not been carried out	Detailed breakdown of costs unseen The overall figures and assumptions for cost and budgeting provided by TUSA have been tested by comparison against other toll roads (average cost per lane mile, etc). It is recommended that detailed O&M Costs be provided by TUSA for independent review.	TUSA confirms that O&M costs and contracts will be made available to the lenders' technical and legal advisors for comment.

Transurban (USA) Inc

Pocahontas Parkway

Lenders' Traffic Advisor

Final Report

April 2006

Halcrow LLC

Transurban (USA) Inc
Pocahontas Parkway
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Final Report
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Halcrow LLC has prepared this report in accordance with the instructions of their client, Transurban (USA) Inc, for their sole and specific use. Any other persons who use any information contained herein do so at their own risk.

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Transurban (USA) Inc
Pocahontas Parkway
Lenders' Traffic Advisor
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Contents Amendment Record

This report has been issued and amended as follows:

Issue	Revision	Description	Date	Signed
1	A	Interim Report	2/9/05	MJ
1	B	Final Draft	8/9/05	MJ
2	A	Final Report included revised traffic data	21/12/05	MJ
2	B	Final draft	23/12/05	MJ/TJGB
3	A	Revised	15/3/06	MJ
4		Revised	31/3/06	TJGB
5	A	Revised	18/4/06	MJ
6	A	Revised with Wilton Farm Traffic	24/4/06	MJ
6	B	Final Version	28/4/06	MJ

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3

Previous Traffic Studies

3.1

Previous Traffic Studies

3.1.1

Halcrow has reviewed three traffic studies prepared for PPA prepared by Wilbur Smith Associates (WSA), as follows:

- Route 895 Connector Comprehensive Traffic and Revenue Study, WSA 14th May 1998;
- Traffic and Revenue Update Study, Route 895 with Airport Connector, WSA, 20th May 2002; and
- Pocahontas Parkway Rate Review Study, WSA, June 2004.

3.1.2

The following sections provide a brief overview of each study.

3.2

Route 895 Connector Comprehensive Traffic and Revenue Study

This 1998 92-page study was used for the purposes of securing the initial bond financing for Pocahontas and should be considered to be of 'investment grade' standard. The study was prepared for the Morrison Knudsen Corporation (now part of the Washington Group based in Boise, Idaho) and Flour Daniel. The 1998 study is based on a previous WSA study conducted in 1996 with only minor changes being made to the previous forecasts and no further modelling work. WSA state that they used a transportation model supplied by VDOT for their earlier 1996 modelling work. Key work undertaken by WSA in 1998 included:

- a review of socioeconomic forecasts provided by Richmond Regional Planning District Commission (RRPDC) - socioeconomic forecasts were reviewed by an independent consultant for reasonableness;
- review and update of a transportation model provided by VDOT;
- activity projections for Richmond Airport, also reviewed by an independent consultant for reasonableness; and
- Stated preference surveys aimed at estimating the value of time and willingness to pay.

3.2.1

Key conclusions from this were:

- Based on an opening toll of \$1.50 for autos and completion in January 2002, WSA estimated traffic and revenue in the opening year of 7.1m transactions and \$11.651m; (this is equivalent to an AADT of 19,520 in the opening year); ramp-up is assumed to take place over a year and to reduce initial traffic by 20%;
- WSA estimated that 95% of traffic would pass through the mainline toll plaza; tolls were assumed to increase by \$0.25 every four years;

- Annual transactions (traffic growth) are assumed to increase by 2.7% p.a. and annual revenue is assumed to increase by 5.8% p.a. - the difference between the growth rates being accounted for by the escalating toll rate of \$0.25 every four-years;
- Estimated time savings were between 10 and 15 minutes of driving time, and a distance saving between 5.6 to 9.8 miles;
- Based on Stated Preference (SP) surveys, WSA estimate that the average VOT for potential users is \$8.54/hour at 1996 prices with 65% of the participants surveyed indicating that they would plan to use Route 895;
- Employment in the corridor was forecast to grow at 1.3% p.a. between 2005 and 2015 at a regional level compared with historic growth of 2.5% during the 1980s; Chesterfield County is expected to grow at 2.1% p.a. to 2015 whilst Henrico County is growing at 5% but from a low base;
- Population was forecast to grow at 1.1% p.a. to 2015; population growth in the Chesterfield region was expected to grow at 1.6% p.a. and Henrico County at 2.5% p.a.;
- Population and Employment growth is expected to occur outside the City of Richmond, with the downtown area expected to experience further decline;
- No growth rates for Richmond Airport are stated.

3.3

Traffic and Revenue Update Study, Route 895 with Airport Connector

This 2002 101 page study provided an update of the 1998 study with traffic and revenue forecasts from 2003 to 2042. The key difference between this study and the 1998 one is the presence of the Richmond Airport Connector Road. Significant new work undertaken by WSA in this report included:

- New traffic count data were collected;
- A further origin-destination (OD) survey at Richmond Airport;
- New computer assignments of the transportation demand model based on new socioeconomic data and roadway conditions.

3.4

Pocahontas Parkway Rate Review Study

3.4.1

This 33 page report was commissioned by PPA in 2004 in response to the lower than forecast toll revenue from the Parkway. WSA was asked to determine whether the estimated toll revenue streams from an updated five-year forecast and toll sensitivity scenarios comply with the rate covenant of the Master Indenture Trust i.e. whether PPA could meet its capital and interest repayment obligations. Subsequent to this assessment, WSA was asked to recommend revised tolls to enable PPA to comply with the rate covenant set out in the Master Indenture Trust. WSA's key recommendation was to increase tolls for autos from \$1.50 to \$2.00. Work undertaken by WSA for this study included:

- Current highway analysis which included traffic counts at Laburnum ramps, count data for other highways in Richmond, travel times surveys and analysis of traffic and toll revenue for Pocahontas;
- Origin-Destination surveys at the mainline toll plazas;
- Economic analysis - an update of previous work and another review of the Richmond International Airport;
- Traffic demand analysis - an updated five year forecast; and
- Toll sensitivity analysis - a range of forecasts based on different toll regimes.

3.4.2

WSA cited a number of possible reasons for actual transactions being lower than forecast. These include:

- *Ramp-up period* - the initial assumption was that ramp-up would be complete within twelve months of opening but the facility appears to be still in ramp-up 26-months after opening; this and the late opening is claimed to have reduced revenues by 15%;
- *Late opening* - the facility was due to open in January 2002 but was not fully open for service until October 2002, 10-months late;
- *RIC activity* - in 2004 passenger traffic was only 80% of that forecast in 1998, and cargo only 53%; this is claimed to have reduced initial revenue by 5%;
- *Corridor specific growth* - corridor specific growth has not occurred at the rate forecast in the 1998 study; this is claimed to have reduced early year revenue by 10%;
- *Screenline growth* - traffic across the James River screenline grew on average by 1.5% p.a. between 1995 and 2003; this low growth is attributed to economic conditions and 11th September 2001; this is claimed to have reduced revenue by 8%;
- *Lower average tolls*. The study assumed that 9% of traffic would be commercial trucks but the observed level is close to 3%. This is claimed to have reduced revenue by 8%.

3.4.3

In total these factors add up to a reduction in revenue of 46% compared with the 2002 forecasts. Two other areas of interest from the WSA Rate Review Study report are the Origin-Destination (OD) Surveys and the updated base case and sensitivity tests. These are discussed below.

Origin-Destination Surveys

3.4.4

In the Rate Review Study, WSA undertook an OD survey of 1,248 users in 2004. WSA asked users to estimate their perceived time saving, hence providing a means for estimating the revealed preference value of time (VOT) since the toll is known. Based on the survey, the weighted average time saving is 14.0 minutes at the toll

plaza. On the basis of an average toll of \$1.51, the weighted average value of time is \$6.47 per hour. This value is considered low.

Updated Based Case & Sensitivity Test

3.4.5

In the Rate Review Study WSA present a revised base case forecast for a \$1.50 toll. Based on this revised forecast, WSA concluded that PPA will be unable to meet its debt service requirements. This is despite assuming ramp-up continues into 05/06 with transactions growing at 12%, and then at 9%, 7% and 6% over the next three fiscal years. (The actual traffic growth rate is 7.2% in 2005).

3.4.6

WSA then reviewed the toll sensitivity, with a recommendation to increase tolls to \$2.00, and which PPA subsequently implemented in August 2004. WSA estimated that this would increase revenues by 17% but reduce traffic by 12%. This implies an elasticity of -0.48. In fact, revenues increased by 15% whilst traffic volume fell by only 8% (see section 3.8). This suggests that the WSA toll model produces reasonable results. WSA also estimated \$2.50 as the revenue maximising toll.

4

Existing and Historic Traffic Patterns

4.1

Historic Traffic and Revenue Growth

4.1.1

After an initial toll free period (to allow trial by prospective users), Pocahontas Parkway became fully operational in September 2002. Actual traffic and toll revenue data were made publicly available on the PPA website from the day of opening. Halcrow have also reviewed traffic count data for various highways in the Richmond area. These data are made available by VDOT on their website and have also been provided by Transurban. This section presents a review of traffic and revenue patterns to date.

4.1.2

Current tolls are shown in Table 4-1. Based on average time saving of 12 minutes (Pocahontas Parkway Web Site) this would give a revealed preference VOT for cash payers of \$10 per hour and within the range set out in Table 1 of Transurban's report.

Table 4-1: Current Toll Rate Schedule (January 2006)

Vehicle Class	Mainline Toll Plaza	Laburnum Avenue
2-axle	\$2.25	\$0.75*
3-axle	\$3.25	\$1.75
4-axle	\$4.25	\$2.75
5-axle	\$5.35	\$3.75
Vehicle with 6 or more axles	\$6.25	\$4.75

*All vehicles paying cash

4.2

Traffic Growth

4.2.1

Figure 4-1 shows traffic volumes (all modes) on the Parkway indexed to the volumes during the opening month (October 2002 = 100). Figure 4-1 shows that traffic growth did not start until March 2003, six months after opening. The opening period was preceded by a toll free period to encourage initial use of the Parkway. From March 2003, traffic grew steadily up to August of that year before temporarily falling off in September. The next significant fall occurred during the winter of 2003/2004, focussed on January. Throughout 2004, traffic grew steadily through to June before dropping in July and August (month of toll rate increase). Data show a steady increase from a low in January through to June. As of June 2005, traffic volume is 74% higher than during the first full month of operation (October 2002). The low traffic during January reflects seasonal variation and is typical for a highway predominantly serving commuters and business trips.

4.2.2

Figure 4-1 shows two distinct trends. Firstly, seasonality is reflected in changes in demand across the calendar year (see section 4.4). Secondly, there is an underlying upwards trend reflecting year-on-year traffic growth - for example, compared with traffic in October 2002 (=100), June 2003 has an index of 137, June 2004 165 and June 2005 174. On an annual basis traffic grew by 18.6% between 2003 and 2004, and 6.8% between 2004 and 2005. (Note: high early growth rates are indicative of early ramp-up.)

4.3

4.3.1

Driver response to toll increase

It is also possible to observe a change in traffic volume (and corresponding increase in toll revenue) resulting from the toll increase implemented in August 2004. Visual inspection of Figure 4-1 suggests that the toll increase had an impact on traffic growth for the rest of 2004 before traffic growth resumed after the winter of 2004/2005. However, the net decrease in traffic volume is more than offset by the increase in toll revenue. It is also likely that the toll increase in 2004 may also have influenced the ramp-up period, which may account for the slower rate of growth between 2004 and 2005. It is, however, difficult to disentangle these two different effects.

Figure 4-1: Historic Parkway Traffic Growth

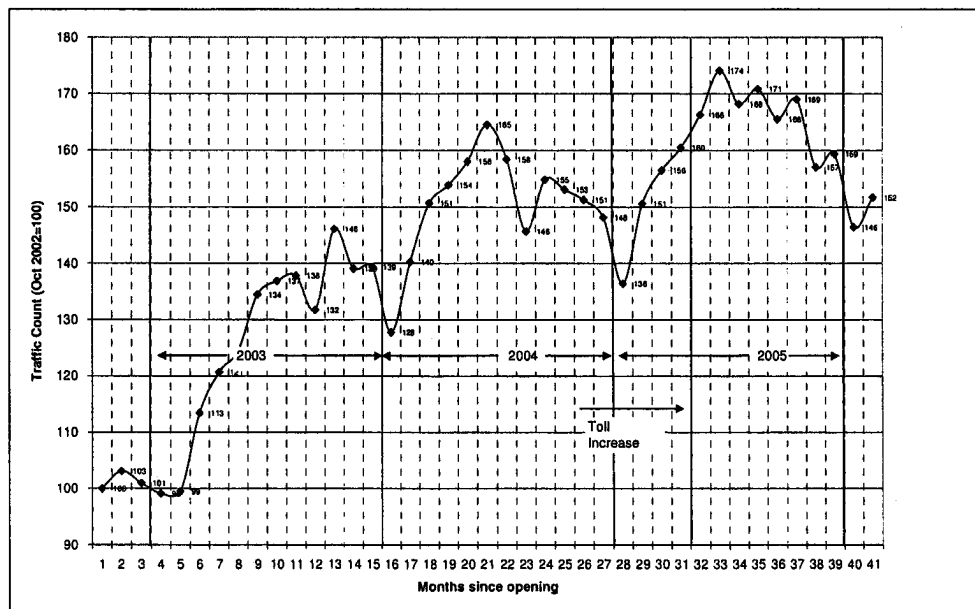
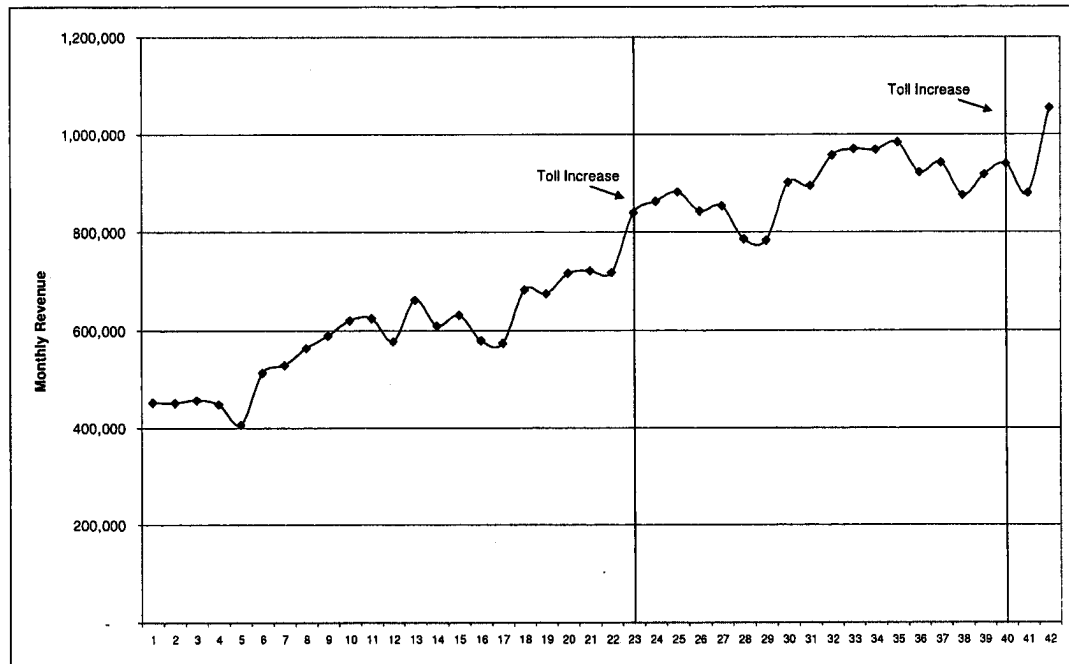


Figure 4-2: Average Daily Toll Revenue by month since opening



4.3.2 Figure 4-2 shows the total toll revenue from the opening period to date. The notable feature of Figure 4-2 is the increase in toll revenue post August 1st 2004 when auto tolls were increased from \$1.50 to \$2.0 or average tolls (all vehicles) by 23%. Tolls were also increased in January 2006 from \$2.0 to \$2.25 making March 2006 the highest revenue earning month since opening.

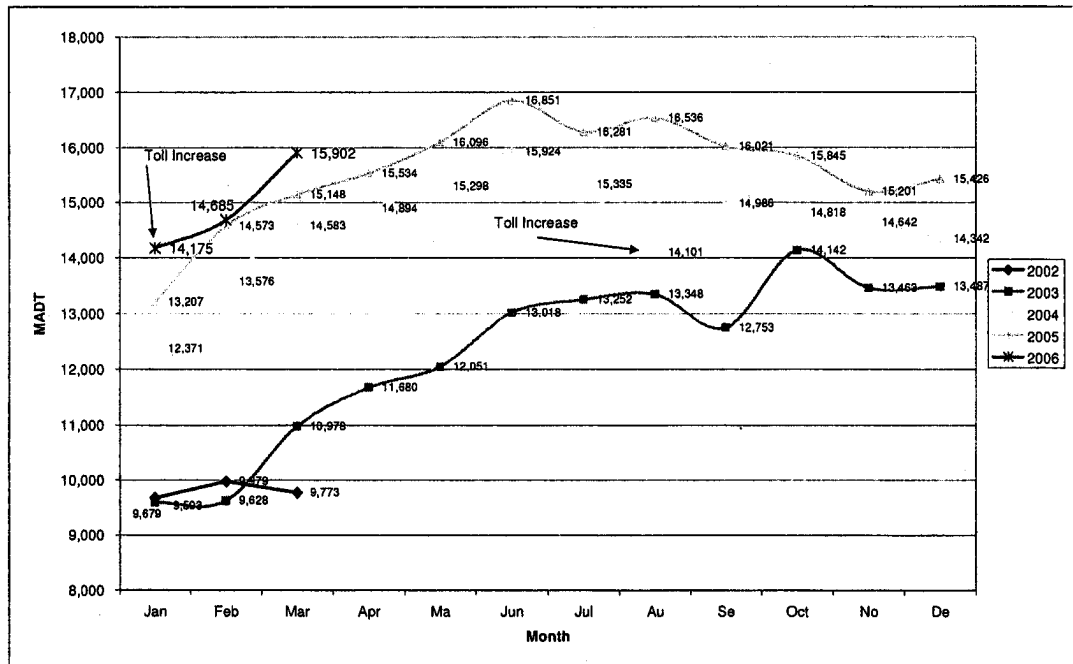
4.4 *Monthly Traffic Patterns*

4.4.1 Figure 4-3 shows monthly traffic patterns and seasonal effects. The traffic characteristics of the Parkway are considered typical of an urban freeway. For example, the increases in September reflect the return to work after the summer break and the start of school run trips. Traffic levels in January, historically the month which has the lowest traffic, reflect the end of the Christmas and New Year holidays and possibly bad weather.

4.4.2 The growth in traffic between 2004 and 2005 is shown in Figure 4-3. A key issue is whether the observed underlying growth still reflects ramp-up or whether traffic is now growing at the same rate as other highways in the Richmond Metropolitan Area (RMA). Currently (March 2006), monthly traffic volume is 4.7% higher than the corresponding value from the same month in the previous year. As can be seen from Figure 4-3, 2005 monthly average daily traffic (MADT) values are

consistently higher than in 2004, despite the toll increase in August 2004. Values for 2006 are also higher than those recorded in 2005.

Figure 4-3: Monthly Traffic Patterns

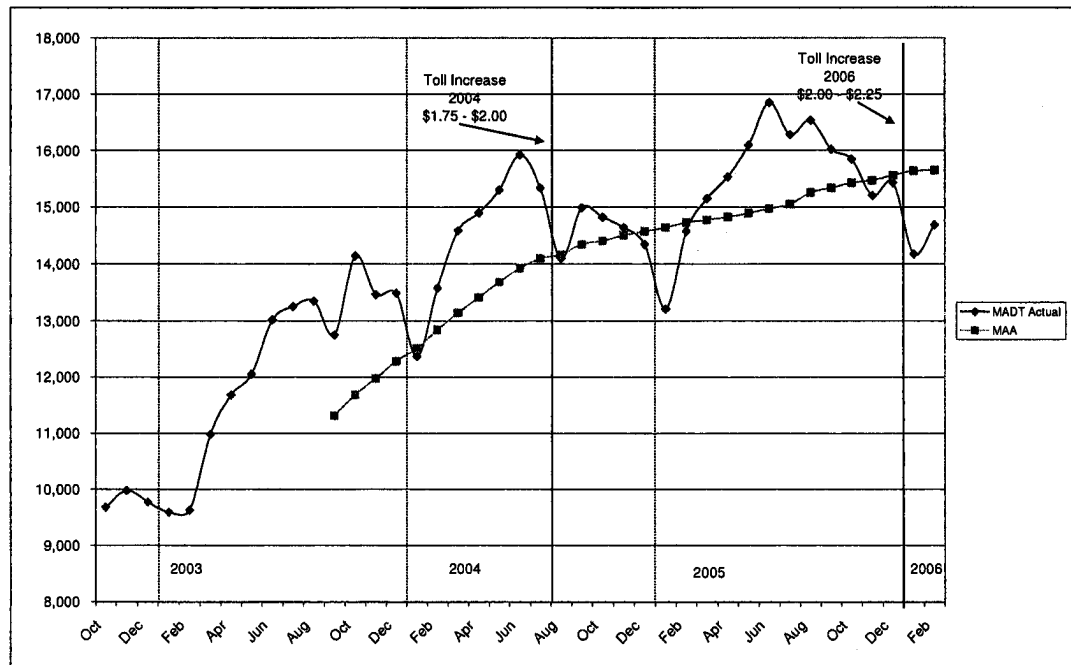


4.5
4.5.1

Moving Annual Average

Figure 4-4 shows monthly traffic on the Parkway and the moving annual average (MAA). The MAA provides an insight into the underlying traffic growth and smoothes any seasonal effects. The impact of the toll increase can be seen in Figure 4-4; after the toll increase in January the rate of underlying growth has slowed from 0.56% per month to 0.26% per month. The rate of traffic growth also slowed following the toll increase in August 2004.

Figure 4-4: Actual and MAA



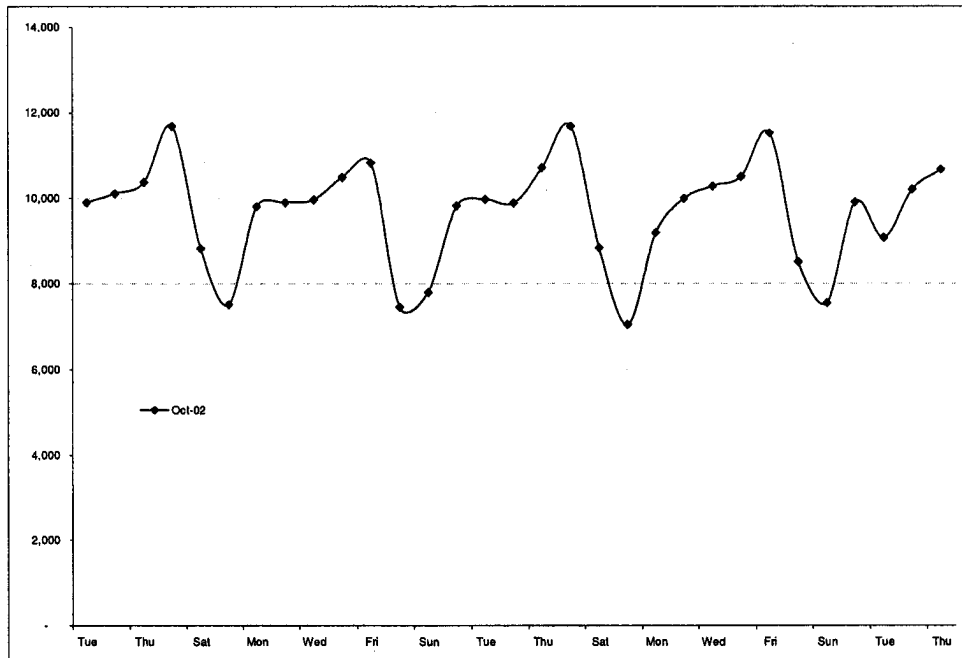
4.6

4.6.1

Daily Traffic Patterns

Daily traffic patterns are shown in Figure 4-5 which is typical of the profile throughout the year. Figure 4-5 is based on October 2002, which is considered to be a neutral traffic month (analysis presented by WSA for analogous highways in the Richmond area show an identical profile). Traffic volumes are lower over the weekend with Sunday having the lowest traffic. Traffic then builds up during the week with Friday having the highest demand (with peak demands most likely at Friday PM). This pattern is typical of an urban freeway.

Figure 4-5: Daily Traffic Patterns



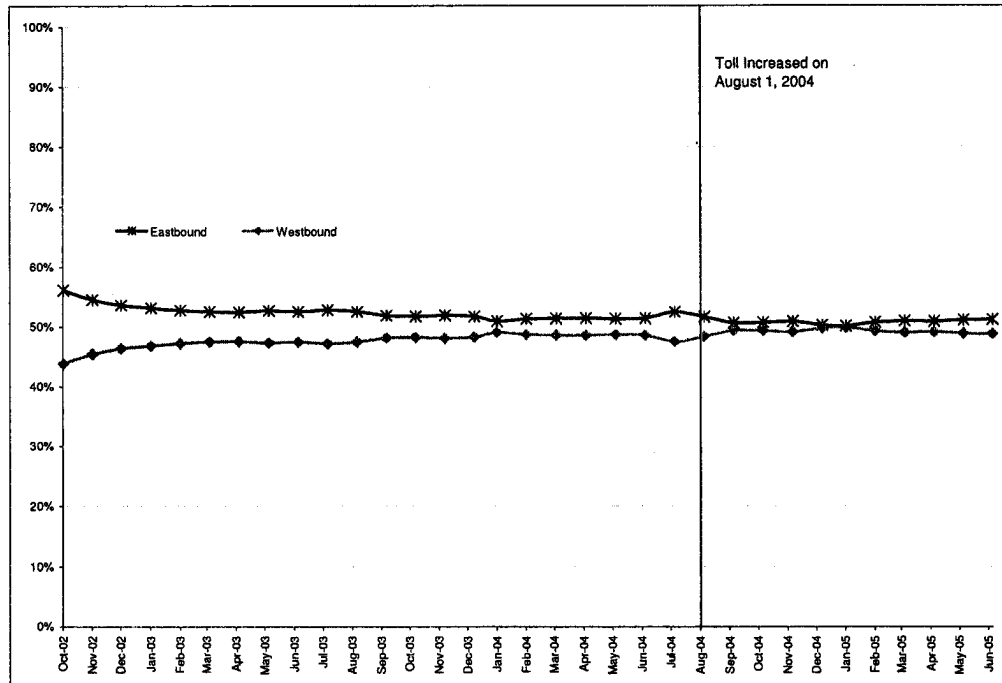
4.7

4.7.1

Direction of Travel

Figure 4-6 shows the direction of travel based on transaction data. It shows there is a small difference between eastbound (52%) and westbound (48%) traffic. Figure 4-6 also shows the general trend over time with eastbound higher than westbound traffic since the Parkway opened. The August 2004 toll increase appears to have had no impact on the direction of travel. The imbalance suggests that some users may be avoiding the toll on their westbound journeys by varying their route.

Figure 4-6: Direction by Transaction



4.8

Revenue by Source

4.8.1

There are two main sources of revenue (see Figure 4-7):

- ETC (Electronic toll collection). This requires the user to have pre-registered for an in-car transponder. The mainline toll plaza is designed to allow ETC payment to take place without stopping or slowing down; and
- Cash Tolls: Cash tolls can either be paid using automatic coin machines (ACM) or a staffed toll booth (MLT – main line toll).

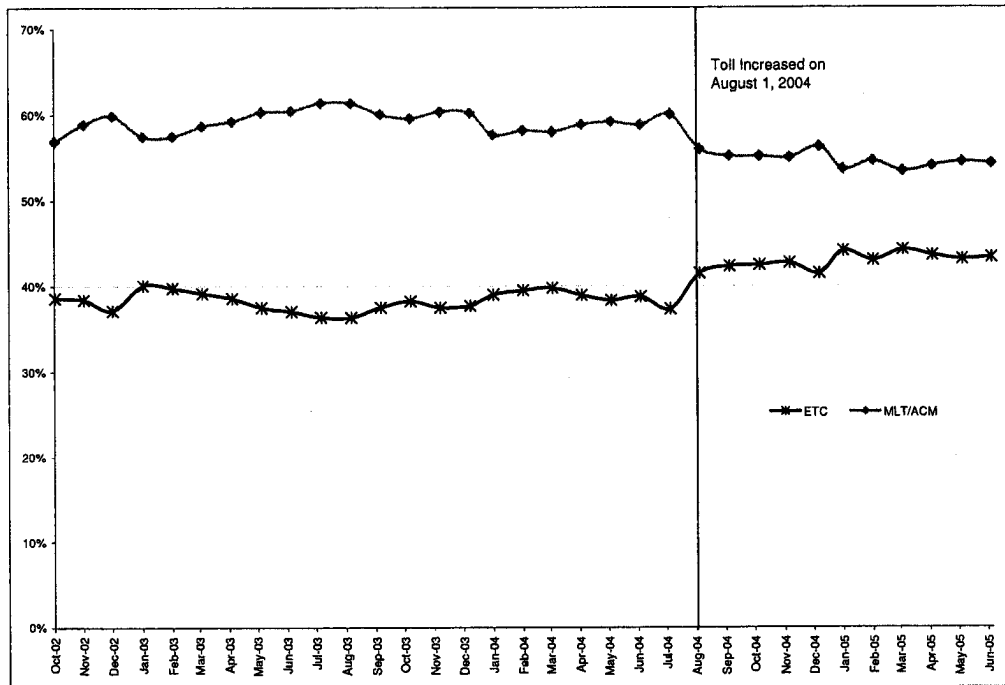
4.8.2

The general arrangement is shown in Figure 4-8 where the overhead gantry housing the ETC equipment can be seen on the right hand side and the MLT/ACM toll booths are on the left hand side. The Vietnam Veterans Memorial Bridge can be seen in the background of this figure.

4.8.3

There are also tolls on the entry/exit ramps at Laburnum Avenue. However, usage of these ramps is minimal. They account for only 1.1% and 1.4% exit and entry respectively.

Figure 4-7: Revenue by Source



4.8.4

Currently, ETC accounts for 43% of total revenue whilst MLT/ACM accounts for the remaining 54% to 55%. (Note the difference is accounted for by a small percentage of violators – see below). The toll increase in August 2004 caused a drop in the proportion of MLT/ACM tolls collected and a corresponding increase in ETC tolls. This suggests that the toll increase probably impacted most on infrequent users.

Figure 4-8: Pocahontas Mainline Toll Plaza



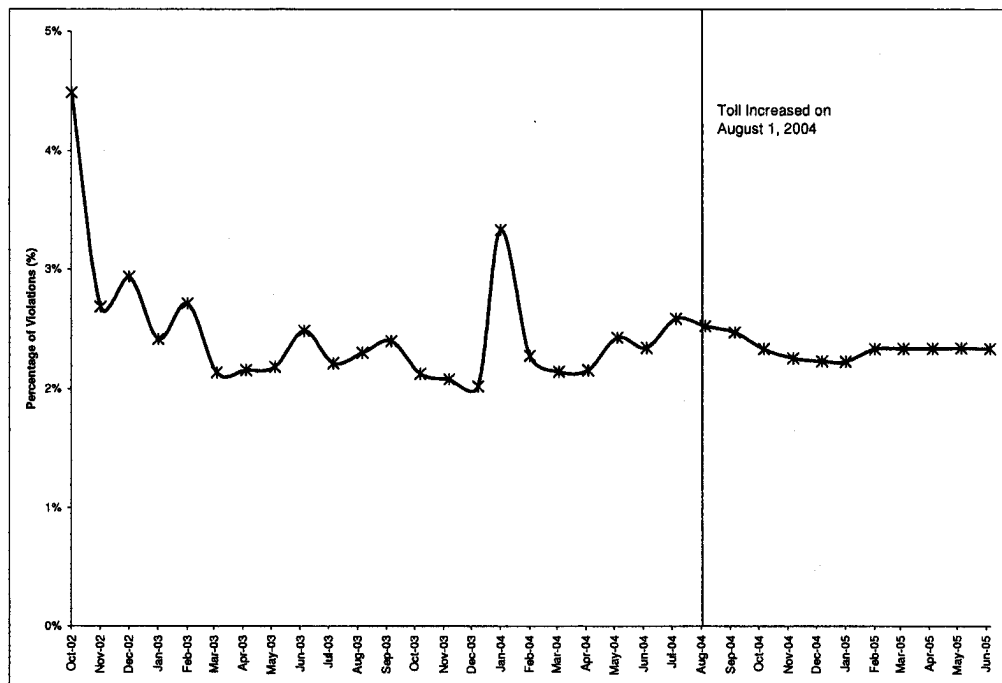
4.9

4.9.1

Violations

Figure 4-9 shows violations as a percentage of total transactions. Currently, the violation rate is running around 2.3%, down from an initial level of 4.5%. The toll increase in August 2004 appears to have had no material impact on the violation rate. It should be noted that this does not mean that violators do not eventually have to pay. PPA is understood to mails bills to violators. We understand that Transurban are intending to implement a stricter enforcement regime.

Figure 4-9: Violation Rate



4.10

4.10.1

Statistical Analysis between Traffic Volume and Tolls

Halcrow has examined the statistical relationship between the toll rate and traffic volumes. In general, travel demand can often be correlated with wider macro-economic indicators such as GDP, employment, population, car-ownership, land-use and so on. However, given the relatively short duration that the Parkway has been open, it is difficult to determine the correlation between these wider variables and travel demand, particularly during its ramp-up period. The analysis presented here is confined to reviewing the impact of the toll rate rise in August 2004.

4.10.2

Tolls were increased on 1st August 2004 based on the recommendations from the WSA Rate Review Study. Tolls for auto were increased from \$1.50 to \$2.0 with a discount offered to EZ Pass users. The toll increase produced an immediate increase in total revenue despite an initial drop in traffic volume. The nominal increase in toll rate was from an average toll of \$1.55 up to \$1.90, or a 23% rise. This corresponded to an 8% fall in traffic volume (compared to the previous month) which is equivalent to a toll demand elasticity of -0.35. However, this is likely to understate the elasticity value since underlying traffic growth and seasonality effects are also included in the 8% traffic change. A value of -0.35 implies a relatively inelastic market response, i.e. there should be further scope to increase tolls in order to achieve revenue maximisation (the point of revenue maximisation is achieved when the toll demand elasticity is equal to -1.0).

Subsequently tolls were increased in January 2006 and this appears to have increased yield although underlying growth has slowed.

4.10.3 In order to produce a more reliable estimate, a regression model was built using log-linear transformations and applying a correction for time-series autocorrelation. The adjusted model produces an elasticity of -0.67 (S.E. 0.18), higher than the value reported above but nonetheless credible. The model has an adjusted R-squared of 0.92 suggesting the model is well behaved. The model has difficulty estimating the elasticity coefficient because of the distorting effect of the ramp-up period which may account for the higher value.

4.10.4 This analysis indicates that there is still some scope to increase tolls as the implied elasticity value is still below -1.0. However, it is unlikely that a further 23% increase in tolls would achieve the same revenue impact as occurred in August 2004.

4.11 *Corridor Traffic Growth*

4.11.1 In order to assess the potential for traffic growth on Pocahontas, it is necessary to understand the underlying traffic growth in Richmond. This represents the 'natural' increase in traffic that is linked to macro changes in population, employment, car-ownership and economic activity in the Richmond area. Four methods are outlined here to assess traffic growth: VDOT count data, screenline analysis, transactions on Powhite Parkway, and demographic changes.

VDOT Count Data

4.11.2 Traffic counts in greater Richmond are collected by VDOT. The data collection program consists of permanent and short count traffic stations, as follows:

- *Permanent traffic count stations:* there are approximately 21 permanent traffic count stations, which collect data continually throughout the year. An expanded program was recently introduced and data for some of these stations is available for the period of 1998 to 2004. These data are considered reliable.
- *Short count stations:* data are collected at numerous short count stations every three years. The surveys cover a 2-day period and the counts are factored to AADT based upon the profile of a nearby permanent traffic count station. This data collection program meets the requirements for monitoring regional air quality but cannot be considered reliable.

Screenline Analysis

4.11.3 A screenline consists of a series of roads crossing a defined area such as river crossing, municipal boundary or major highway. A review of screenline traffic volume, preferably by time of day, can be used to establish regional trends and compensates for variation in roads due to construction, major network changes

and so on. Screenline analysis is considered a reliable method for assessing traffic growth. However, reliable time-series data over screenlines are not available.

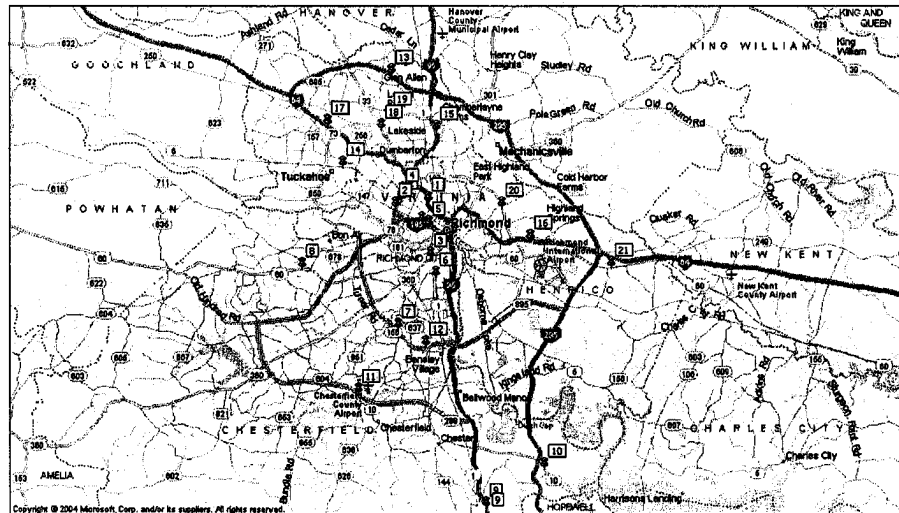
4.11.4

Table 4-2 is a summary of relevant permanent count traffic data (note the gaps in the data set.). The location of the traffic counters is shown in Figure 4-10.

Table 4-2: VDOT Permanent Counts

	Perm Station	Route	Description	Traffic Counts						CAGR	
				1998	1999	2000	2001	2002	2003		2004
Richmond		95	I-64 South Interchange	132,161		132,520	135,997	140,656		1.6%	
	2	195	SR 76 Powhite Pkwy		66,362				76,294	3.5%	
	3	360	Midlothian TnPk		27,126			22,188	21,710	-1.0%	
	4	33	US 250; Staples Mill Rd			27,369	27,369	27,507	28,203	27,512	0.4%
	5	195	Ramp to Byrd Street					36,683	37,480	38,357	2.3%
	6	1	Bellmeade Rd	16,061				16,861	15,861	15,933	-0.1%
Chsterfield	7	10	North of Hwy 150		43,204		46,747	48,265		50,072	3.0%
	8	60	West of 295				55,562	56,622	56,622	54,880	-0.4%
	9	95	North of Petersburg						87,221	89,594	
	10	10	East of 295		25,624			25,572		26,286	0.5%
	11	288	West of 10		29,205	31,346	33,294	35,193	37,591	41,090	7.0%
	12	150	West of 1							53,937	
Henrico	13	295	East of US33	40,382			46,466	47,753	50,048	53,279	4.7%
	14	6	East of 73	17,775			18,114	18,253	17,926		0.2%
	15	95	US 301 Chamberlayne Ave				46,399	48,327			
	16	64	Laburnum Ave		49,476		49,931	48,816	45,828	45,650	-0.4%
	17	65	0.4 E Ramp from/to Gaskins								
	18	33	Parham Rd		30,107			32,244	33,236		2.5%
	19	7518	US 33 Staples Mill Road	27,645				28,437			0.7%
	20	Laburnum	S of Creighton	21,356					22,404	22,784	1.1%
	21	60	I-295					12,261	12,811	12,976	2.9%
	average										1.7%
average for South Richmond (stns 7-10, 12, 16, 20, 21)										1.1%	
average for Northwest of Richmond (stns 1, 2, 4, 5, 13-15, 17-19)										2.0%	

Figure 4-10: Location of Permanent Count Stations



4.11.5

The average growth rate over all these stations varies. The average growth over stations with more than two consecutive years of data is 1.7% p.a. Spatially, the growth rates are 1.1% and 2.0% p.a. in south Richmond and northwest Richmond, respectively. Growth rates at individual stations can be misleading; for example,

the growth rate at station 11 (SR 288 west of Highway 10) has been approximately 7% p.a. However, a proportion of this traffic is from the recently opened extension and may be diverted traffic from parallel facilities. Based on the data shown in Table 4-2, background traffic growth in the Richmond area is between 1.1% and 2.0%, with an average of 1.7% p.a.

Transactions on Powhite Parkway

4.11.6

Another useful source of traffic data are transactions from Powhite Parkway. Based upon a transaction summary provided in the WSA 2004 Pocahontas Parkway Rate Review Study, the following points can be made:

- Between 1992 and 2002 traffic on Powhite Parkway grew by 1.6% p.a. This includes the effect of a toll increase in 1998 and the impact of the Powhite Parkway Extension, which was also opened in 1988;
- From 1992 to 2002, the Powhite Parkway Extension traffic grew by 4.0% p.a. Presuming that ramp-up ended in 1993, the average growth from 1994 to 2002 was 3.2% p.a.;
- From 1993 to 2003 Downtown Expressway traffic grew by 1.5% p.a.;
- There was substantial growth (15%) from 1998 to 1999 concurrent with the introduction of "Smart Tag" on the Powhite Parkway Extension. If this one time growth is removed from the time series data, the average growth rate between 1993 and 2003 is approximately 1.5%.

4.11.7

Based on this analysis, background traffic growth on Powhite Parkway, assuming that ramp-up is complete, is approximately 1.5% - 1.6% p.a. over a 10-year period.

Changes in Demographics

4.11.8

There is a strong relationship between population and traffic growth. Subject to assumptions with respect to car ownership, growth in population can be expected to lead to growth in traffic. The change in population between 1990 and 2000 by County within Richmond Regional Planning District is provided in Table 4-3.

Table 4-3: Population Change Greater Richmond Area 1990 – 2000

County	1990	2000	Change	
			Percent	CAGR
Charles City County	6,282	6,926	9%	1.0%
Chesterfield County	209,599	259,903	19%	2.2%
Goochland County	14,163	16,863	16%	1.8%
Hanover County	63,306	86,320	27%	3.1%
Henrico County	217,878	262,300	17%	1.9%

New Kent County	10,466	13,462	22%	2.5%
Powhatan County	15,328	22,377	32%	3.9%
Richmond City	202,713	197,790	-2%	-0.2%
Richmond Regional PDC	739,735	865,941	15%	1.6%

- 4.11.9 Population in greater Richmond grew by 15% between 1990 and 2000, or 1.6% p.a. (CAGR). Spatially, Chesterfield and Henrico counties grew by 2.2% and 1.9% p.a. respectively. The Parkway is located within Henrico County. (Henrico County also covers part of northern Richmond). The areas with the largest population growth are Hanover County (north-west Richmond) and Powhatan County (west Richmond). Richmond City saw a drop in population of 2% over the decade reflecting the continuing decline of the downtown area of Richmond. This contrasts with the population growth in the surrounding counties.

Summary

- 4.11.10 A reasonable range for background traffic growth is between 1.1% and 2.2% p.a.

Key Conclusions

- 4.12.1 The following conclusions can be drawn:

- WSA's traffic forecasts have proved to be optimistic including the most recent 2004 revised forecast - neither the absolute volume of trips or the rate of traffic growth have materialised since opening of the Parkway;
- A number of factors are advanced for the optimistic forecasts but problems include land-use assumptions and screenline growth;
- The revealed preference VOT, across all users, is \$6.47 per hour (based on WSA's survey work). This is considered low;
- Long term background traffic growth in the Richmond area is between 1.1% and 2.2% p.a.;
- Existing VDOT traffic data are insufficient to allow a complete picture of traffic trends around the Parkway; and
- WSA's toll model appears reasonable with regard to setting toll levels and actual market response is in line with expectations.

5

Review of Transurban Traffic Forecasts

5.1 *Introduction*

5.1.1 The discussion presented in this chapter is based upon traffic numbers provided to Halcrow by Transurban and subsequent sensitivity tests. With respect to traffic risk, we also recognise that the facility is already open and that the traffic ramp-up period is almost complete. This reduces start up traffic risk to lenders.

5.1.2 However, the location of Pocahontas within Richmond's highway network, together with the dispersed nature of trip distribution and no large and thriving Central Business District (CBD), mean that developing accurate traffic forecasts is considered demanding (as evidenced by WSA's previous optimistic forecasts). And, as discussed in the previous section, the lack of reliable traffic data is considered a significant deficiency, particularly with regard to model validation.

5.1.3 Essentially, Pocahontas forms part of an orbital expressway around Richmond but lies in a corridor without major commuting flows and with highly dispersed low density land-use. (Low density development is typical for much of the City of Richmond and surrounding counties). This is illustrated by the district to district desire lines (figure 7 of Transurban's report) which do not show a strong desire line in the AM peak across the James River in Henrico County. As noted by Transurban it also highlights 'the attractiveness of the south east quadrant of the city for development as [current demand] is low compared to other parts of Richmond'

5.1.4 This section reviews Transurban's traffic model and results.

5.2 *Transurban Traffic Model*

General Approach

5.2.1 We understand that the Parkway traffic model has been built using the Cube/Voyager commercial traffic package and is based on an adapted 24-hour model developed by VDOT using the TP+ platform. The VDOT model is based on VDOT's land use scenarios and highway networks (including proposed changes) with two horizon years of 2007 and 2026. It is understood that VDOT's model is primarily used to assess air quality in accordance with FHA regulations. Transurban's model is a three step network model (trip generation, trip distribution and assignment) and follows a standard industry approach for developing traffic forecasts, with particular focus on route choice options. The advantage of a network model is that it should be able to accurately model the attractiveness of alternative routes.

- 5.2.2 The Transurban model is used to determine route choice using fixed trip matrices. This is reasonable since redistribution and ramp-up effects are largely complete and should be reflected in existing count data. In order to provide better time disaggregation, Transurban's model is divided into four time periods: AM, PM, IP and OP. Traffic demand varies by time of day with the Parkway generating most of its traffic during the AM and PM peaks i.e. commuting/journey to work trips; hence accurately modelling these time periods is essential. This is also the period when the Parkway offers the largest travel time saving vis-à-vis free alternatives and should be used as the basis for determining optimum toll levels. Trip matrices were taken from the existing VDoT model and divided into these four time periods using historical count data.
- 5.2.3 Pocahontas tolls are modelled by inserting a 'time penalty' in the path costs (translated into a time penalty by using the VOT by user class) for alternative routes across the network; with those routes involving the Parkway incurring additional time to represent the toll. Since different classes of users have varying levels of willingness to pay (WTP), the variation in driver responses to the same toll rates can be incorporated into the model through a multi-class assignment. To this effect Transurban have introduced three user classes defined by income groups. Values of time (VOT) are adjusted in the model to reflect the WTP of these user groups, and thereby the model's sensitivity to tolls is improved. This is a conventional industry approach to modelling toll roads. We understand that the VOT has been adjusted such that no trips from the lowest income group are assigned to the Parkway. The VOT given in Table 1 appear reasonable and sensibly stratified, but more important than the absolute values the model should be capable of replicating observed demand.
- 5.2.4 Different toll regimes can be tested by altering the toll within the model and then re-running the model assignment. It is understood that this was done for each forecast year to ensure that optimum tolls (i.e. revenue maximising) were in place. Demand elasticities are therefore implicit within the model. Whilst there are other more sophisticated tolling algorithms we believe the approach outlined above is sensible and consistent with industry practice.
- Model Calibration*
- 5.2.5 Model calibration has been undertaken against existing VDoT count data. As noted the quality of existing count data is known to be variable. In order to take into account the weakness in the data set, TU applied global growth factors of 1% for inner and 2% for outer urban areas to factor up 2003 counts to 2005.
- 5.2.6 Travel times within the model are based on data taken from the 2007 VDoT model and, as acknowledged by TU, this assumes that the original VDoT 2000 model was correctly calibrated. Table 6 in Transurban's report shows travel time comparisons for the four time periods compared to the VDoT assumptions.

5.2.7 Screenlines are shown in Figure 3 of Transurban's report and the comparisons shown in Table 5 of Transurban's report demonstrate that the model gives a reasonable fit against observed counts.

5.3 *Tolls*

5.3.1 The proposed toll regime is given Table 3 of Transurban's report (and Table 5-1 below). An across the board increase in current tolls of 25c was implemented in 2006. This equates to an increase of 14% for ETC users and 11% for cash payers.

Table 5-1: Proposed Tolls Main Toll Plaza

Vehicle Class	2006 - 2007	2008 - 2010	2011 - 2012
2-axle paying cash & using Smart Tag	\$2.25	\$2.75	\$3.00
3-axle	\$3.25	\$3.75	\$4.00
4-axle	\$4.25	\$4.75	\$5.00
5-axle	\$5.25	\$5.75	\$6.00
Vehicle with 6 or more axles	\$6.25	\$6.75	\$7.00

5.3.2 We note that Transurban propose removing the toll differential between ETC users and cash users in January 2007. Whilst ETC users can be considered 'captive' in the short-term and will therefore have a relatively inelastic response to this toll increase, in the longer-term this may not be the case. However, this will increase revenue.

5.4 *Transurban Model Results*

5.4.1 Two scenarios are modelled as shown in Table 18 of Transurban's report. The first is a calibration forecast which *excludes* the Wilton Farm (WF) development and Richmond Airport Connector (RAC). The second is the Sponsor's base case or BCTM which includes both WF and RAC.

5.4.2 The BCTM is based on the current network and uses VDoT land-use assumptions with regard to population and employment and with the conservative assumption that the 2026 scenario is achieved in 2030. Intermediate model years have been estimated by using linear extrapolation. (It should be noted that WSA argue that 10% of the shortfall in their forecast traffic volumes was caused by a failure of VDoT land-use assumptions to materialise). The BCTM is run with the toll schedule outlined above and the AWDT results are shown in Table 5-2. Note Transurban propose removing the ETC discount in 2007.

5.4.3 Traffic in the calibration forecast drops in 2009 compared to 2007's level. We understand this is caused by an increase in toll from \$2.25 to \$2.75 in 2008, or 22% (Transurban model only gives numbers for 2007 and 2009, so the drop is likely to occur in 2008). We have reflected this drop in traffic in our LBC and LLSC.

However, the increase does not push tolls beyond the point of revenue maximisation. We understand that toll sensitivity tests have been undertaken by varying tolls for each model forecast year to assess capture rates by user group within the model. This ensures tolls are close to revenue maximisation.

Table 5-2: Transurban Forecasts AWDT

	2005	2007	2009	2012	2017	2022	2026	CAGR 2005 - 2022
Calibration	17,007	19,208	18,220 (1)	22,239	23,030	28,733	33,093	3.13%
BCTM	17,007	21,019	26,796	34,278	39,400	48,948	54,712	6.42%

(1) see para 5.4.3 for an explanation of this drop.

- 5.4.4 The calibration forecast has an estimated compound growth rate between 2005 and 2022 of 3.13% compared to background traffic growth in the Richmond area which is estimated at between 1.5% and 1.7% p.a. The difference therefore represents the increase in capture rate attributable to the VOT escalator and network congestion (see below).
- 5.4.5 It is widely accepted that VOT increases with disposable income and that if income is increasing over time, then average VOT will also tend to increase; i.e. more users will be willing to pay to receive the same benefit as before. However, the relationship between income and VOT need not be directly proportional. Academic literature suggests that VOT increases between 0.25 and 0.75 the rate of income increase. Transurban have used average weekly earnings (AWE) with an assumed nominal growth rate of 4% and CPI at 3%. Taken together, this gives a real AWE rate of 1%. Hence the difference between the calibration forecast and background growth appears reasonable.
- 5.4.6 Traffic growth can also be driven by the change in travel time savings i.e. as network congestion increases the relative travel time saving also increases; this would also allow for further increases in the real toll. Increased network congestion is estimated to account for 0.2% of traffic growth based on sensitivities undertaken by Transurban. This growth is dependent on the network reaching the levels of forecast congestion particularly during the later years of the concession period i.e. beyond 2022.
- 5.5 ***Richmond Airport Connector***
- 5.5.1 Table 5-3 gives incremental values for RAC and Wilton Farm. Wilton Farm is assumed to open in 2007 but with construction starting in 2006 and RAC in 2009.
- 5.5.2 Given the importance of RAC to the project financing, Transurban were asked to estimate the volume of additional traffic that the airport connector would generate.

In 2009 RAC generates an additional 2,162 trips. Given that RAC will offer only a minor improvement in journey times but improved convenience from I-295, the increase in trips appears reasonable. Some existing airport traffic is expected to switch from Laburnum Avenue to the airport connector; this has no net impact on forecast toll revenue.

5.5.3

It is understood this forecast does not include potential upsides from the recent redevelopment of Richmond Airport and plans by a low-cost operator to develop services.

Table 5-3: Incremental Traffic for RAC & Wilton Farm

Transurban Forecasts	2005	2007	2009	2012	2017	2022	2026
Calibration	17,007	19,208	18,220	22,239	23,030	28,733	33,093
BCTM	17,007	21,019	26,796	34,278	39,400	48,948	54,712
Incremental Traffic							
Richmond Airport Connector	n/a	n/a	2,162	2,042	1,459	1,840	2,003
Wilton Farm & local traffic	n/a	1,405 (1)	3,442	5,473	10,390	13,353	13,481
Wilton Farm interchange redistributed traffic (ramped)	n/a	405 (2)	2,972	4,524	4,521	5,022	6,135

- (1) No significant Wilton Farm development trips are forecast in 2007; these are local reassigned trips.
- (2) These are redistributed trips derived from the improvement in accessibility resulting from the Wilton Farm Interchange. Transurban have applied a ramp-up to these trips as follows: 2007: 10%, 2009:70%, and 2012: 100%, see discussion below. Values in Table 5.3 include ramp-up.

5.6

Wilton Farm Interchange and Development

5.6.1

Wilton Farm is the largest proposed development in the southeast Richmond area and is an important source of future traffic for Pocahontas Parkway. At full build out, the Wilton Farm development is expected to consist of c. 3,209 residential properties, a 31-acre town centre site and 69-acres of parks. We understand that construction of the interchange that will provide access to the Parkway is expected to begin in 2006 and that this interchange will be used by construction related traffic during the development build out. We understand that the first phase of construction of the development is expected to begin in 2007 with a mixture of town houses, apartments and condos, and that the developer (HH Hunt) is well respected and has a track record of other similar premium developments which have been completed on time in the Richmond area. A letter dated February 1st, 2005 from the Henrico County Planning Department to HH Hunt detailing the Conditional Rezoning Approval requested by HH Hunt confirms the development scope and proposed geometry as assumed by Transurban.

5.6.2

We have reviewed two documents regarding the development at Wilton Farm:

- Conditional rezoning for the Wilton Farm area from Agricultural District and Light Industrial to Urban Mixed Use. This document from the Henrico Planning Department is dated February 1st 2005 and addressed to HH Hunt the proposed developer. Under the rezoning, residential development of up to 3,209 units is permitted at full build out. The document sets out detailed requirements with regard to the mix of housing types and, in particular, applicable square feet;
- Limited Access Control Change Route 895 Alternative, Henrico County, dated December 15th, 2005. This document from the Commonwealth Transportation Board provides HH Hunt the necessary approval from Henrico County to construct an interchange on I-895 to the Wilton Farm development. It is understood that the interchange will be built solely at the cost of the HH Hunt.

5.6.3 On the basis of these documents, it is our understanding that HH Hunt has the necessary approvals from Henrico County Planning Department for both the Wilton Farm development and the new interchange with I-895, as assumed by the Transurban forecasts. We are content that Transurban's forecasts for trips from Wilton Farm reflect the composition and scale of the new development over a 13 year build out period which seems reasonable for a development of this size.

5.6.4 The new Wilton Farm ramps will be located close to the existing main line toll plaza and Wilton Farm residents will be required to pay the main line toll to access the Pocahontas Parkway. The development represents a significant increase in toll revenue to the Project Sponsor. Wilton Farm will also be connected to the local highway network via a new local road providing residents with an alternative exit. This new local road will not be tolled. The new road will connect Wilton Farm with Osborne Turnpike and will also improve local access to Pocahontas Parkway for non Wilton Farm traffic; as such, the access improvements are likely to generate additional traffic onto the Parkway.

5.6.5 Table 5.3 shows the impact of the Wilton Farm development on traffic projections using the new interchange with Pocahontas Parkway at Wilton Farm. Based on traffic data provided by Transurban and analysed by Halcrow, the Wilton Farm interchange traffic can be divided into three primary elements, as follows:

- *Wilton Farm development traffic:* this is new traffic generated by the residential development and which uses the new interchange to access the Pocahontas Parkway. This element of the Wilton Farm traffic projections is subject to any risks related to the planned phasing and start date of the development. Excluding these risks, Halcrow is satisfied with the assumptions relating to trip generation from the development within Transurban's model. In particular, Transurban has assumed Wilton Farm

users have similar travel characteristics as other trips in the model. No risk adjustment has been applied to this portion of traffic (see 6.4.2).

- *Wilton Farm Interchange Re-assigned Trips:* Halcrow has reviewed the Transurban Model and is content with the model assumptions and projections relating to the construction of the free alternative local access road in terms of its impact on the re-routing of local non-Wilton Farm trips. Some of these trips will be using the Laburnum Avenue Interchange to access Pocahontas Parkway but will divert to the Wilton Farm interchange when this opens. No ramp-up has been applied to these reassigned trips using the Wilton Interchange.
- *Redistributed/Induced Traffic:* Significant changes in accessibility affect both land-uses and travel patterns over time. Trips arising from these changes are known as redistributed or induced/suppressed trips. Transurban's model includes a distribution sub-model to forecast redistributed trips. Typically, these trips may not occur instantaneously but their effects build up over a number of years, possibly 5 years or longer as changes in employment or home location may be involved. The Pocahontas Parkway is likely to result in land-use and travel pattern changes in the less developed southeastern quadrant of the Richmond area. Since this traffic component carries higher projection uncertainty in terms of magnitude and timing, Halcrow has applied a ramp-up to this portion of the projected traffic (see Section 6).

5.6.6 The Wilton Farm development is expected to account for 52 % of the total Wilton Farm interchange traffic in 2009, increasing up to 67 % in 2022.

5.6.7 In Halcrow's opinion, the proposed Wilton Farm traffic and revenue forecasts in the LBC traffic scenario represents a reasonable assumption of the likely impact and growth of traffic and revenue on the Pocahontas Parkway resulting from the Wilton Farm development and associated highway infrastructure, assuming this is developed as planned.

6

Sensitivity Tests

6.1

Sensitivity Tests

6.1.1

Transurban has run several scenario tests exploring the impacts of different development rates to Wilton Farm with and without the Richmond Airport Connector. The results of these tests are summarised in their report. Halcrow has requested a number of additional sensitivity tests with the Transurban model in order to better understand other key issues and assumptions and to ensure the model behaves sensibly and rationally. Not all the key issues have been tested but those that have are:

- (a) Value of time;
- (b) Underlying traffic growth (in this context, the rate at which Virginia Department of Transport's development plans are in place); and
- (c) Network delays (in this context, changing the junction delay function in the model by +/-50%).

6.1.2

The results of the specific scenario and sensitivity tests carried out for this project are displayed in Table 6-1. The table shows the low and high case forecasts relative to Transurban's forecasts. The sensitivity tests were undertaken against the calibration forecast. We have not risk adjusted the forecasts for Wilton Farm or RAC. The results of the scenario and sensitivity tests are the key inputs into the risk analysis, described in the following section.

Table 6-1: Summary of Sensitivity and Scenario Tests

Variable or Assumption	Change in 2022 Forecast AWDT to Transurban's BCTM
Wilton Farm and RAC scenarios	+62% (Wilton Farm) and +6% to 16% (RAC) ¹
Value of time -50% to +50%	-38% to +21% (See Table 11 of Transurban's report)
Traffic growth (assuming the 2026 VDoT plans are reached in 2026 to 2030;)	-6% to +13% (see Table 9 of Transurban's report)
Network delay	-10% to +15% (See Table 10 of Transurban's report)

¹ 62% is the percentage of total trips in 2022 generated by the Wilton Farm development. Similarly the percentage of total trips attributable to RAC is between 6% and 16%.

6.2

The Risk Analysis

6.2.1

The risk analysis procedure involves the following three steps:

- identification of the key input variables that affect the Base Case (in this case, the calibration scenario) forecasts,
- definition of the probability distributions and ranges for each key variable,
- running Halcrow's RISK model.

6.2.2

The first task is to identify which variables need to be included in the risk analysis, and to identify the effects of changes in these variables on the traffic forecasts. Thereafter, a probability distribution for each of the selected factors needs to be defined. For each variable, the maximum and minimum input values must be determined, along with the shape of the curve. Once the probability distributions are defined and the impact of each variable on the traffic determined, the RISK program determines an overall probability distribution for the forecast traffic in each forecast year.

Step 1 - Identification of Key Variables

6.2.3

The first step is to identify all those variables which could have a significant effect on the resultant traffic levels if their values differed from those assumed in the Base Case forecasts. In this context, a toll rate for Pocahontas Parkway (PP) is not a 'risk' but only the assumptions that could affect the Base scenario for each toll rate scenario. However, input assumptions to the models and model methodologies are 'risks'. Only a limited range of sensitivity tests have been undertaken by Transurban, and so some key risks need to be covered by a parameter covering general uncertainty. The key risks used in the sensitivity analysis are as follows:

- the accuracy of the base data (covering the accuracy of the base year trip tables, base year network speeds, and the assumed 2005 starting point for transactions);
- growth in the value of time over time;
- the rate at which VDOT land use projections are reached;
- network delays;
- model forecast traffic growth on Pocahontas; and

- all other factors including model and data errors.

6.2.4 Wilton Farm and RAC have been excluded on the basis that they will either occur or not, and if they do, their effects will be as forecast. The results of the risk analysis can thus be applied to scenarios with or without these developments.

6.2.5 The key downside on base traffic levels appears to be a lower value of time. The value of time in the base year however should not be changed as this is a calibrated value and replicates existing toll paying behaviour. The real issue, therefore, is how the value of time increases over time, rather than the absolute value of time in the base year. This is normally related to how the real wealth of drivers increases over time (as discussed in the previous section). The change in GDP per capita is normally used as a proxy for wealth, and it is commonly assumed that the value of time increases either in line with the increase in GDP per capita or at some proportion of it. For the risk analysis we have assumed that the compound effect of a lower increase in the value of time over time will reduce traffic and revenues by 10% compared to the base case by 2022, or an increase traffic and revenues by 8% in the case of a higher assumed growth rate. In either case, there is a smaller impact than assuming that the VOT is either 50% higher or lower than the central case (as run in the Transurban sensitivity tests).

6.2.6 Between 2009 and 2022, annual traffic growth rates vary between 3% pa up to 7% pa for the calibration forecast with an average compound growth of 3.13% pa. By comparison, trips across the entire network are only increasing at 1.7% pa over this time period. The difference between the calibration growth and background growth is based on the following reasonable assumptions: Pocahontas is still experiencing ramp-up which is expected to continue until 2007/2008. In 2008 a large increase in toll causes traffic to drop but it then recovers in subsequent years (hence giving strong growth following the negative impact of the toll increase). Between 2012 and 2017, the traffic grows at a conservative rate of 0.7% p.a., relatively to an average toll rate growth of 6.7% over this period. From 2017 onwards traffic grows between 2.0% and 5.9%, assuming that increasing network congestion will improve the attractiveness of Pocahontas. Over the same period the VOT is also increasing which will increase the capture rate of road.

6.2.7 The risk analysis has been undertaken twice with a traffic growth variable, once with this variable and once without, in order to compare the results.

Step 2 - Definition of Probability Distributions and Ranges for Key Variables

6.2.8 Where possible, we have defined the probability distribution for these variables as either:

- normally distributed around their base value, with the 95% confidence range defined from the results of the sensitivity tests or otherwise based on assumption or experience; or
- in a triangular distribution (described as 'continuous') with the low and high ends derived from Transurban's scenario forecasts and sensitivity tests.

6.2.9

Variables which are NOT normally distributed are as follows:

- Growth in the Value of time over time, where the range either side of the base case value is assumed to be defined by the results of the sensitivity tests;
- The rate at which VDoT's land uses are achieved, with the results taken from Transurban's sensitivity test on this issue;
- Network delays, where the range either side of the base case value is assumed to be defined by the results of the sensitivity tests; and
- Model forecast traffic growth, which is all downside.

6.2.10

The ranges and type of probability distribution for each variable are summarised in Table 6-2.

Table 6-2: Traffic Ranges and Distributions for Each Key Variable

Variable	Type of Distribution	Range of impact compared with Base forecast (i.e. 0% = Base)
Growth in Value of time over time	Continuous	-9% to +9% 2022
Traffic growth	Continuous	-6% to +13% 2022
Network delays	Continuous	-10% to +15% 2022
Model forecast traffic growth	Continuous, starting at a level that caps growth at 3% pa and which increases to the BCTM forecast	-12% to +0% 2022

Executive Summary

Summary

Pocahontas Parkway (the Parkway) has been fully open since October 2002. The Parkway provides an 8.8 mile tollway between I-95/Chippenham Parkway and I-295 in Henrico County. Since opening traffic volume has shown strong growth, albeit from a base 50% lower than forecast prior to opening. In 2005 the Parkway had an annual average daily traffic (AADT) of 15,560 vehicles per day. Annual traffic increased by 18.6% between 2003 and 2004 and by a further 6.8% between 2004 and 2005. Over the same time periods toll revenue has grown by 32% and 22% respectively. Tolls were increased in January 2006 from \$2.00 to \$2.25 at the main line toll plaza.

The Parkway lies to the south of Richmond, a medium sized metropolitan area which is currently economically buoyant. It offers both time and distance savings to users compared with alternative routes in this corridor, and it provides a third crossing of the James River. The lack of bridge facilities in the area means that there is limited direct competition to the Parkway from alternative routes.

As an existing toll road, the issues of revenue risk are largely confined to future traffic growth and toll rate policy. The combination of existing revenues, growing traffic, real benefits, and limited competition are compelling reasons for believing that the Parkway could be an attractive prospect for privatisation and potential lenders.

In the case of an existing toll road, we believe that the following criteria reflect the key issues that are necessary for a successful project:

- the State or Regional Government should strongly support and identify with the potential role played by the toll road within the overall highway network for the area, and of the private sector in managing and operating the road;
- the project should solve a real and apparent problem, and be appropriately specified to do this;
- future revenues from the project should be well based and not dependant on speculative events or developments; the local economy should be vibrant enough to ensure a viable potential market for the toll road; and

- tolls should be affordable with a sensible tolling strategy and escalation.

The Parkway mostly meets all these criteria. Specifically,

- its privatisation is led by the public authorities who currently operate it;
- The Parkway offers real, albeit moderate, travel time and operating cost (shorter distance) benefits to its users and provides one of only three opportunities in this area to cross the James River;
- Future traffic growth on the road is affected by one specific development (Wilton Farm). Planning permits and access rights have already been granted to the developer HH Hunt for Wilton Farm. The Project Sponsor anticipates ground to be broken on this developed in June 2006. However, existing and most future traffic and toll revenues growth for the Parkway are not dependant on specific land use developments but on the general economic vibrancy of a currently growing metropolitan area; and
- Tolls are affordable and projected to remain below their revenue optimum.

Transurban and Lenders' Forecasts

Using the forecasts developed by Transurban and the results of additional sensitivity tests requested by Halcrow in a Monte Carlo type analysis, we have developed a Lenders' Base Case and probability related forecasts for the Parkway. Although the latter were only developed for 2022, forecasts for other years are assumed to follow the same traffic profile as Transurban and are as shown in Table E.1.

Table E-1: Pocahontas Traffic Forecasts Average Week Day Traffic (AWDT)

LENDERS' BASE CASE TRAFFIC FORECAST								
Year (Calendar)	Unit	2005	2007	2009	2012	2017	2022	2026
TRAFFIC VOLUME								
Transurban (AWDT)	CAGR							
	Calibration 3.13%	17,007	19,208	18,220	22,239	23,030	28,733	33,093
	BCTM 6.42%	17,007	21,019	26,796	34,278	39,400	48,948	54,712
Lenders' Forecasts (AWDT)								
	Lenders' Base Case (LBC) 6.38%	17,007	20,164	25,947	33,760	39,400	48,671	53,739
	Lenders' Low Side Case (LLSC) 5.62%	17,007	19,508	25,947	31,467	37,527	43,101	46,161

(1) CAGR are for the period 2005 - 2022

The Lenders' Base Case (LBC) scenario represents our best estimate of future traffic. The Lenders' Low Side case (LLSC) is a reasonable low case assumption for testing robustness in a Lenders' financial model with an acceptable level of risk for Lenders.

The LBC and Lenders' Low Side cases *include* Wilton Farm and RAC. Lenders are advised to run sensitivities on the Wilton Farm development and seek additional comfort from the Project Sponsors. Halcrow is able to verify that the traffic assumptions with regard to the Wilton Farm development are reasonable.

Estimated weekday revenue based on a weighted average toll (to reflect ETC discount and vehicle mix) is shown in Table E.2

Table E-2: Estimated Weekday Revenue

LENDERS' BASE CASE TRAFFIC FORECAST								
Year (Calendar)		Unit	2007	2009	2012	2017	2022	2026
Toll Revenue - Transurban (AWDT)								
	Calibration	\$	41,921	48,602	64,715	92,707	132,387	170,131
	BCTM	\$	45,874	71,478	99,749	158,605	225,528	281,274
Toll Revenue Lenders (AWDT)								
	Lenders' Base Case (LBC)	\$	44,009	69,214	98,242	158,605	224,252	276,271
	Lenders' Low Side Case (LLSC)	\$	42,578	69,214	91,568	151,064	198,588	237,313

2

Introduction

2.1 *Project Background*

2.1.1 Transurban (USA) Inc is considering purchasing the rights to operate the Pocahontas Parkway and has signed a memorandum of understanding (MOU) with the Pocahontas Parkway Association (PPA) and Virginia Department of Transportation (VDOT) to enter into confidential and exclusive discussions for the purpose of reaching an agreement to enter into a concession to operate and collect tolls on the Pocahontas Parkway.

2.1.2 Transurban undertook a traffic and revenue forecast to support a bid to own and operate the highway. This study, and the resulting traffic and revenue forecasts, is described in 'Pocahontas Parkway Traffic Report, February 2006.

2.1.3 Halcrow LLC ('Halcrow') was appointed to undertake an audit of the traffic and revenue forecasts on behalf of potential lenders that may provide credit instruments in relation to the project. Halcrow has a sole duty of care to the Lenders in the preparation of this audit.

2.1.4 It should also be noted that this is not a standalone report and should be read in conjunction with the Pocahontas Parkway Traffic Report. Halcrow has only added specific commentary where it feels the Transurban report is deficient, or additional analysis is warranted.

2.2 *Project Description*

2.2.1 The 8.8-mile Route 895, or Pocahontas Parkway ('The Parkway'), connects I-95 at Chippenham Parkway in Chesterfield County with I-295 in Henrico County near Richmond International Airport (see Figure 1-1). The project was the first ever constructed under Virginia's Public Private Transportation Act of 1995. Construction started in 1998 and the Parkway was fully operational in October 2002 with the opening of the ramp from Interstate 295 north to Route 895 west. This final portion of the Parkway was not part of the original contract and was added in 2000. The development and construction costs of the project were funded through a loan from the Commonwealth Transportation Board and through the establishment of a 'not-for-profit' entity, PPA, which issued a series of senior and subordinated tax-exempt bonds.

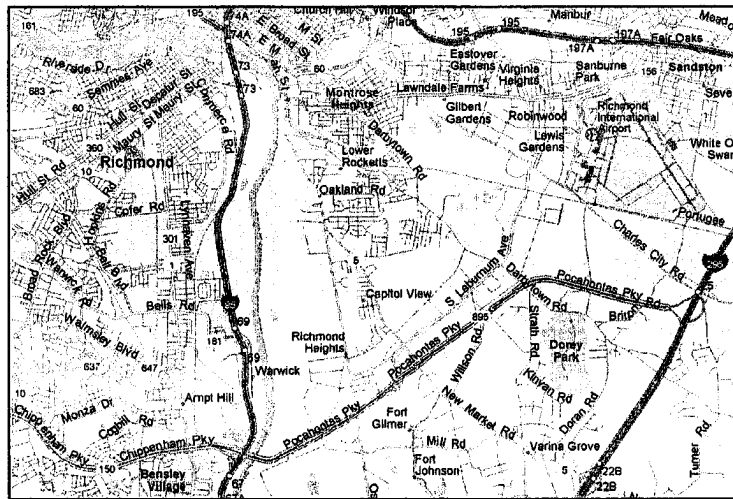
2.2.2 Pocahontas Parkway offers a congestion-free ride and is tolled at \$2.25 (autos) with Smart Tag (ETC) operation using the Mid-Atlantic Region's first high-speed open-lane toll facility, with users able to make toll payments at normal highway speeds. The Parkway offers both travel time and distance savings, and has limited direct competition from existing free facilities. Richmond is also served by another

toll road, the Powhite Parkway, which connects the south-western suburbs with downtown Richmond. The Powhite Parkway also crosses the James River.

2.2.3

The large bridge on the Pocahontas Parkway, the Vietnam Veterans Memorial Bridge, was opened to traffic in September 2002, and offers only the third major crossing of the James River in the south Richmond area. The James River forms a natural boundary between east and west Richmond. The three main interstate routes of note are: I-95 which was the original Richmond – Petersburg Pike; I-295 which provides an alternative to I-95 by bypassing the downtown area; and I-64 which is the main east-west route passing through the downtown area.

Figure 1-1: Pocahontas Parkway Toll Road



2.3

Report Structure

2.3.1

Following this introduction, Chapter 2 reviews the previous traffic studies for Pocahontas Parkway. Chapter 3 presents a summary of historic and current traffic on the Parkway. Chapter 4 reviews Transurban's traffic forecasts and our risk analysis is presented in Chapter 5.

Other issues	Normal	-20% to +20% 2022
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Step 3 - Running the RISK Model

- 6.2.11 The final step in the risk analysis process involves running Halcrow's RISK program. The program uses the Monte Carlo method to select values for each of the input variables at random within its appropriate distribution range; that is it is assumed that each combination of values has an equal probability of occurring. This process is repeated 10,000 times to calculate 10,000 combinations of possible outcomes. For each combination, a traffic level is estimated; the distribution of these results and relevant statistics relating to the resultant traffic distribution are then produced.

Risk Analysis – Results

- 6.2.12 The results of the risk analysis are summarised in Table 6-3. They can be most simply represented by the cumulative probability curves shown in Figure 6-1 which shows the results for traffic in 2022. In terms of confidence levels, we assess the Transurban forecasts for 2022 are just over the 45% probability level for traffic. The forecast is not particularly sensitive to the traffic growth variable.
- 6.2.13 The AWDT forecasts at P50, P80 and P90, compared with Transurban's forecasts, are shown in Table 6-3. Forecasts for years before 2022 are assumed to follow the profile given by the Transurban forecasts, but at a lower level, see Table 6-4 and Figure 6-2. CAGR's are given for the period 2005 – 2022.

Table 6-3: Risk Analysis Results

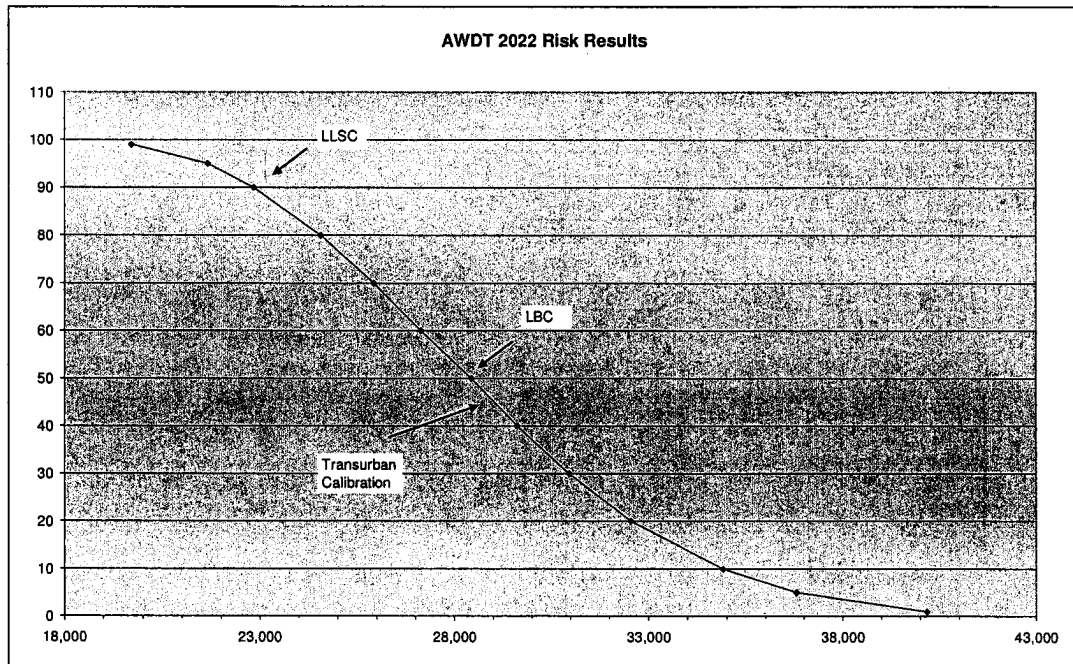
Forecast or Probability Level	Traffic AWDT in 2022 without traffic growth variable	Traffic AWDT in 2022 with traffic growth variable
Transurban Calibration	28,733	28,733
P50 Forecast (i.e. 50% probability and base case of Lenders Traffic Adviser)	29,339	28,456
P80 Forecast	25,540	24,583
P90 Forecast	23,859	22,886

Table 6-4: AWDT Lenders' Base Case & Lenders' Low Side Case

LENDERS' BASE CASE TRAFFIC FORECAST								
Year (Calendar)		Unit	2007	2009	2012	2017	2022	2026
TRAFFIC VOLUME								
Transurban (AWDT)	CAGR							
	Calibration	3.13%	19,208	18,220	22,239	23,030	28,733	33,093
	BCTM	6.42%	21,019	26,796	34,278	39,400	48,948	54,712
Wilton Farm Trips								
	Wilton Farm Trips & reassignment		1,405	3,442	5,473	10,390	13,353	13,481
	Redistributed Trips		4,054	4,246	4,524	4,521	5,022	6,135
	Total Trips Wilton Farm interchange		5,459	7,688	9,997	14,911	18,375	19,616
	Incremental RAC			2,162	2,042	1,459	1,340	2,003
	Total Wilton Farm & RAC		5,459	9,850	12,039	16,370	20,215	21,619
LENDERS' TRAFFIC FORECASTS								
Halcrow Risk Adjusted Calibration								
	Risk Adjusted Calibration P50	3.07%	18,354	18,220	21,721	23,030	28,456	32,120
	Risk Adjusted Calibration P90	1.76%	17,699	18,220	19,428	21,157	22,886	24,542
Lenders' Forecasts (AWDT)								
	Lenders' Base Case (LBC)	6.38%	20,164	25,947	33,760	39,400	48,671	53,739
	Lenders' Low Side Case (LLSC)	5.62%	19,509	25,947	31,467	37,527	43,101	46,161
	Lenders' Base Case (LBC) without RAC	6.14%	20,164	23,785	31,718	37,941	46,831	51,736

(1) CAGR are for the period 2005 to 2022

Figure 6-1: Probability Distribution (AWDT)



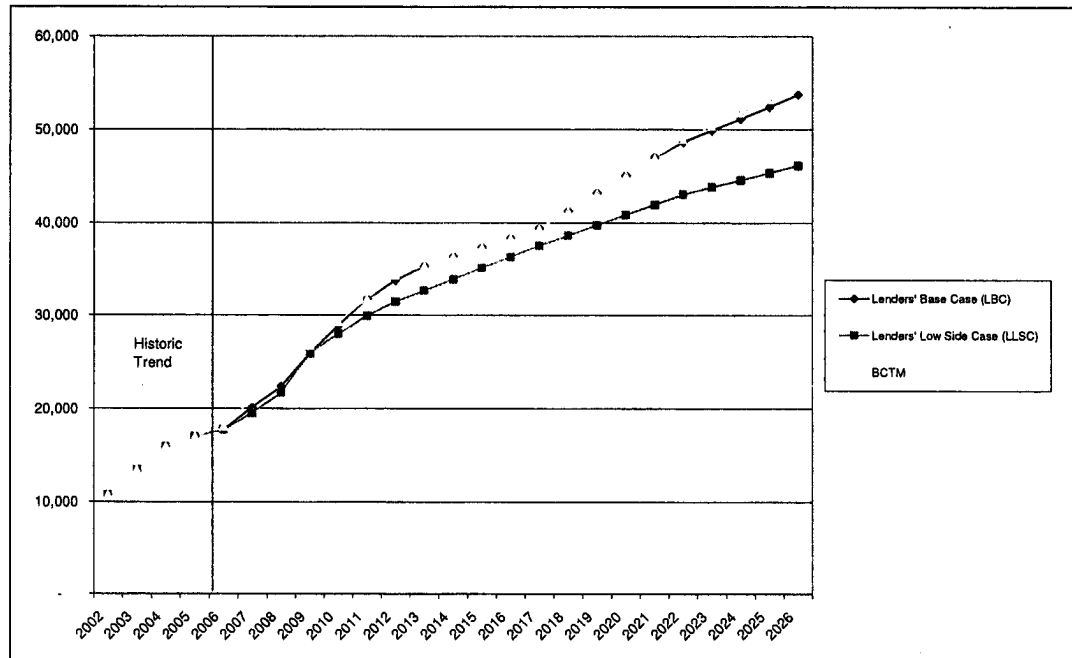
6.2.14

Lenders' traffic forecasts have been developed as follows:

- Halcrow's risk adjusted calibration cases (P50 & P90) have been extrapolated back to 2005;

- We have added incremental traffic for Wilton Farm and RAC, as described in sections 5.5 and 5.6 to the profiled P50 and P90 cases. Wilton Farm and RAC traffic is included in both the Lenders' Base Case and Lenders' Low Side Case; and
- We have applied a ramp-up factor to the Wilton Farm interchange redistributed trips (2007: 10%, 2008: 30%, 2009: 50%, 2010: 70%, 2011: 90%, 2012: 100%) See table 5.3. The same profile is assumed for the LBC and LLSC.

Figure 6-2: AWDT Traffic Forecasts



6.3

6.3.1

Revenue Estimates

Table 6-5 shows estimated weekday revenue. (Detailed calculations can be found in Annex 1). This has been estimated by using an average toll based on existing transactions data which gives a toll paid as equivalent to the mainline plaza toll reduced by 5%. (Based on analysis of transaction data the average toll paid is equal to 0.95 ± 0.01 of the mainline plaza toll). In 2007 Transurban propose removing the ETC discount which is expected to increase the average toll. We therefore recommend increasing the weighting from 0.95 to 0.97.

6.3.2 It is also important to note that the conversion factor used to convert AWDT to AADT can vary. Based on analysis of transaction data we estimate that the conversion factor is 0.92 ± 0.02 . (Transurban use $334/365 = 0.915$). This should be considered when estimating annual traffic and revenue forecasts.

6.3.3 We have also estimated revenue for a Lenders' base case without RAC. Since RAC allows for movements between the Airport and I-295 we have estimated a weighted toll for RAC traffic based upon analysis supplied to us by Transurban.

Table 6-5: Estimated Weekday Revenue

LENDERS' BASE CASE TRAFFIC FORECAST							
Year (Calendar)	Unit	2007	2009	2012	2017	2022	2026
TOLL REVENUE							
Transurban Toll	CAGR						
Mainline Toll Plaza \$	5.22%	2.25	2.75	3.00	4.15	4.75	5.30
Weight	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Weighted Toll RAC Traffic	\$	-	1.34	1.47	2.32	2.82	2.38
Weighted Average All Toll Plaza	\$	2.18	2.67	2.91	4.03	4.61	5.14
Toll Revenue - Transurban (AWDT)							
Calibration	\$	41,921	48,602	64,715	92,707	132,387	170,131
BCTM	\$	45,874	71,478	99,749	158,605	225,528	281,274
Toll Revenue Lenders (AWDT)							
Lenders' Base Case (LBC)	\$	44,009	69,214	98,242	158,605	224,252	276,271
Lenders' Low Side Case (LLSC)	\$	42,578	69,214	91,568	151,064	198,588	237,313
Lenders' Base Case (LBC) without RAC	\$	44,009	66,317	95,241	155,220	219,063	271,504

6.4 Summary

6.4.1 The Parkway lies to the south of Richmond, a medium sized metropolitan area which is currently economically buoyant. It offers both time and distance savings to its users compared with alternative routes in this corridor, and provides a third crossing of the James River for this area. The lack of bridge facilities in the area means that there is limited direct competition to the Parkway from alternative routes. As an existing toll road, the issues of revenue risk are largely confined to future traffic growth and toll rate policy. The combination of existing revenues, growing traffic, real benefits, and limited competition are compelling reasons for believing that the Parkway could be an attractive prospect for privatisation and potential lenders.

6.4.2 In the case of an existing toll road, we believe that the following criteria reflect the key issues that are necessary for a successful project:

- the State or Regional Government should strongly support and identify with the potential role played by the toll road within the overall highway network for the area, and of the private sector in managing and operating the road;
- the project should solve a real and apparent problem, and be appropriately specified to do this;

- future revenues from the project should be well based and not dependant on speculative events or developments; the local economy should be vibrant enough to ensure a viable potential market for the toll road; and
- tolls should be affordable with a sensible tolling strategy and escalation.

6.4.3

The Parkway mostly meets all these criteria. Specifically,

- its privatisation is led by the public authorities who currently operate it;
- The Parkway offers real, albeit moderate, travel time and operating cost (shorter distance) benefits to its users and provides one of only three opportunities in this area to cross the James River;
- Future traffic growth on the road is affected by one specific development (Wilton Farm). Planning permits and access rights have already been granted to the developer HH Hunt for Wilton Farm. The Project Sponsor anticipates ground to be broken on this developed in June 2006. However, existing and most future traffic and toll revenues growth for the Parkway are not dependant on specific land use developments but on the general economic vibrancy of a currently growing metropolitan area; and
- Tolls are affordable and projected to remain below their revenue optimum.

ANNEX 1 – TRAFFIC AND REVENUE FORECASTS

LENDERS BASE CASE TRAFFIC FORECAST																																			
X669 (2306049)																																			
ANNUAL DATA																																			
Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056
TRAFFIC VOLUME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Total Revenue																																			
Transurban (AWDT)																																			
Wilson Farm Trips																																			
Transurban Traffic Growth																																			
LENDERS TRAFFIC FORECASTS																																			
Halcrow Risk Adjusted Calibration																																			
Halcrow Traffic Growth																																			
Lenders' Forecasts (AWDT)																																			
Lenders' Traffic Growth																																			
TOLL REVENUE																																			
Transurban Tol																																			
CAGR																																			
Total Revenue - Transurban (AWDT)																																			
Total Revenue Lenders (AWDT)																																			

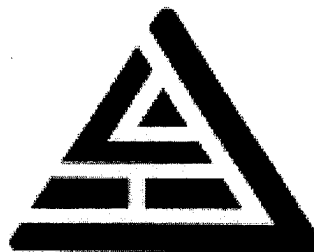
Pocahontas Parkway (Route 895 Connector)

**Insurance Report for
Financial Close**

**DEPFA Bank plc
Banco Espirito Santo de Investimento, S.A.
Bayerische Hypo- und Vereinsbank, AG, New York Branch**

as Lenders

28 June 2006



JARDINE LLOYD THOMPSON CANADA Inc.

This report is intended for the sole use of the Lenders



22 June 2006

JARDINE LLOYD THOMPSON CANADA Inc.

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Pocahontas Insurers Chart (3 pages)	
Insurers Security Ratings (2 pages)	
Property and Business Interruption Program Structure (1 page)	
Comprehensive General Liability Structure (1 page)	



22 June 2006

JARDINE LLOYD THOMPSON CANADA Inc.

Executive Summary

The Insurance Program as incepted by the Transurban Group is adequate for a Toll Highway and Bridge operation of this size and nature within the United States of America. Confirmation of placement of the insurances required for compliance with the Loan Agreement and the Amended and Restated Comprehensive Agreement [ARCA] has been provided by AON New York, AON Melbourne, AON London and Willis Melbourne through the Transurban Group. The required insurance program includes the following coverages:

Insurance Program

- Property Program including Business Interruption
- Terrorism including Business Interruption
- Comprehensive General Liability
- Directors and Officers
- Automobile Liability
- Workers Compensation
- Builders Risks

Conclusion

JLT has reviewed the ARCA, Loan Agreement, and all other information received and has determined that the insurance program required provides sufficient protection to the Lenders and is consistent with our advice regarding sensible levels of insurance coverage, deductible levels, lender protections and specific conditions.

JLT has reviewed the proposed costs of the insurance program that Transurban has provided under the insurance costs in the Financial Model (version 5.09 dated June 22 2006) and JLT has also provided a rough estimate of the cost of a full package of insurance in today's insurance market to evaluate the potential worst-case scenario that the Transurban Group Insurance Program becomes unavailable for this project. Based on this analysis, JLT has determined that insurance costs in the Financial Model are reasonable in today's market for a comparable insurance program and that the Lenders are reasonably protected in the event of a loss under the proposed insurance structure.

JLT also has the opinion that the insurance program incepted is appropriate for the risks specific to this project.



22 June 2006

JARDINE LLOYD THOMPSON CANADA Inc.

JLT has confirmed that all the Insurers' security ratings (Appendix 2) meet the requirement of the Loan Agreement.

JLT has confirmed that the Property and Business Interruption Structure (Appendix 3) and the Comprehensive General Liability Structure (Appendix 4) are acceptable and satisfy the requirements of the ARCA and Loan Agreement

JLT has received Certificates of Insurance and / or Insurance Policies to confirm the insurance program arrangements with insurers for the first drawdown. JLT confirms that the policies include all standard rights and protections to Lenders.


Danny Ewart
Assistant Vice President


Ken McGillion
Executive Vice President



22 June 2006

JARDINE LLOYD THOMPSON CANADA Inc.

Introduction

Background

The Pocahontas Parkway is located approximately seven miles south of the City of Richmond, Virginia. The 8.8-mile Parkway connects I-95 at Chippenham Parkway in Chesterfield County with I-295 in Henrico County near Richmond International Airport. The project was the first ever constructed under Virginia's Public Private Transportation Act of 1995, and was completed in October 2002 with the opening of the ramp from Interstate 295 north to Route 895 west.

The Parkway offers a congestion-free ride and is tolled conventionally and with "Smart Tags" thus allowing payment at highway speeds.

The Vietnam Veterans Memorial Bridge on the Pocahontas Parkway Memorial Bridge was opened to traffic in September 2002, and offers the third major James River crossing in the Richmond area.

Transurban (USA) Inc [the Sponsor] and DEPFA Bank plc [the financial advisor] have been working together with a view to the purchase of the rights to manage, operate, maintain and collect tolls on the Pocahontas Parkway. They have signed a Memorandum of Understanding with the Pocahontas Parkway Association and the Virginia Department of Transportation to enter into confidential and exclusive discussions for the purpose of reaching agreement to enter a concession. The Amended and Restated Comprehensive Agreement will further contemplate the design and construction of the Airport Connector Road (ACR).



22 June 2006

JARDINE LLOYD THOMPSON CANADA Inc.

Obvious Risks in Operations

- Failure of any of the structures and feeder roads
- Pollution including but not limited to run-off to the surrounding land, watercourse and wetlands
- Failure of the drainage system
- Failure of the tolling system
- Physical damage to the Tolling Station
- Vandalism
- Airport Closure
- Road accidents
- Acts of God, including but not limited to tornados, flooding and earthquake
- Employee Crime
- Employee safety
- Repairs and maintenance
- New construction

Existing Assets of Particular Importance

- Vietnam Veterans Memorial Bridge
- Tolling Station
- "Bathtub Area"
- Interchange of Interstate I-95 and Route 895
- Interchange of Interstate I-295 and Route 895
- Interchange of Laburnum Avenue and Route 895



22 June 2006

JARDINE LLOYD THOMPSON CANADA Inc.

Insurance Risk Review and Comments

The continual operation of the Pocahontas Parkway from an insurable risk transfer perspective can be broken down broadly into some distinct insurance categories as follows:

- Property Damage and Business Interruption
- Terrorism and Terrorism Business Interruption
- Commercial General Liability
- Automobile Liability
- Directors and Officers Liability
- Workers Compensation/Employers Liability
- Non-owned Aviation

Our comments, as follows, consider the minimum requirements as set forth in the Amended and Restated Comprehensive Agreement Article 13, the Loan Agreement and a prudent program of insurances to protect the Operator and the Lenders and is based on our experience acting as the broker / advisor for various other Public - Private agreements including toll roads of this size and nature.



22 June 2006

JARDINE LLOYD THOMPSON CANADA Inc.

Property Insurance and Business Interruption (Inclusive of Terrorism Cover)

See the Property and Business Interruption Structure attached in the Appendix.

The Borrower shall per the ARCA and Loan Agreement obtain Property Insurance at replacement cost covering loss, damage or destruction of the Project, including improvements. The limit of such cover can be based on a probable maximum loss analysis by an independent third party acceptable to the department.

An Insurance Assessment was conducted by Ove ARUP & Partners (May 2006) and provided for review. The agreed Sum Insured based on the Probable Maximum Loss identified in such report was USD 310,000,000 (inclusive of Business Interruption with a 3 year indemnity period). The agreed Sum Insured further reflects the agreed Terrorism Limit (inclusive of Terrorism Business Interruption with a 3 year indemnity period)

The requirements as per the ARCA are within the Loan Agreement's scope of cover and are consistent with our advice.

Minimum Requirements as per the Loan Agreement

Property

- All Risk (noting standard exceptions) including – Flood, Earth Movement, Collapse
- Water damage including overflow
- Leakage
- Strikes, Riots and Civil Commotion
- Utility Interruption
- Debris removal
- Business ordinance or law for increased cost of construction
- Valuable papers related to business operations – USD 1 million
- Damage resulting from minor maintenance and repairs
- Costs of demolition and decontamination
- Property whilst in transit or temporarily in off-site storage (only between the Borrowers premises)
- Extra expense and expediting expenses: Sub-limit USD 1,000,000



22 June 2006

JARDINE LLOYD THOMPSON CANADA Inc.

- Fire and forest fire fighting expenses: Sub-limit USD 2,000,000
- Property damaged in the course of construction (Minor Works only)
- Collateral Agent (for the benefit of Secured Parties) named as Loss Payee (claims proceeds required to be deposited into the Loss Proceeds Account or the Proceeds Account in accordance with Section 6.12(c) of the Loan Agreement)
- 90 day notice of cancellation
- Deductibles:
 - Catastrophe Perils (Flood, Earthquake, Named Storm) USD 1,500,000 per claim
 - Other Perils - Bridges and Structures USD 500,000 per claim
 - Other Perils - Buildings, Contents and All other USD 100,000 per claim
 - Terrorism USD 500,000 per claim

Business Interruption

- Interruption or loss of projected Toll Revenues for 36 months
- Non-vitiation clause
- Unintended errors, omissions and misrepresentation
- Evidence of cover
- Professional charges
- Payments to account
- Suppliers extension
- Customers extension
- Utilities extension
- Prevention of access
- 90 day notice of cancellation
- Collateral Agent (for the benefit of Secured Parties) identified as Loss Payee (claims proceeds required to be deposited into the Proceeds Account in accordance with Section 6.12(c) of the Loan Agreement)
- Deductibles:
 - All Perils - Business Interruption USD 350,000 per claim
 - Terrorism USD 500,000

Comments:

Certificates of Insurance and Policies Received

JLT confirms the documents:



22 June 2006

JARDINE LLOYD THOMPSON CANADA Inc.

1. Meets the requirements of the Loan Agreement and the ARCA
2. Are in line with market standard for a project of this size and type
3. Are consistent with JLT's advice regarding sensible levels of insurance coverage, deductible levels, and specific conditions
4. Provides adequate protection clauses for the Lenders

Commercial General Liability

See the Comprehensive General Liability Structure attached in the Appendix.

The Operator shall as per the ARCA and Loan Agreement obtain Commercial General Liability Insurance or its equivalent with limits of not less than USD 50,000,000 per occurrence for bodily injury, personal injury and property damage liability.

Limit: USD 50,000,000

The requirements as per the ARCA are within the Loan Agreement's scope of cover.

- All premises and operations
- Products and completed operations
- Explosion
- Collapse
- Separation of insureds
- Legal defense costs
- Contractual liability
- Name the VDOT as non-contributory Additional Insured (that is, the VDOT will be an Additional Insured without requirement to pay premium)
- 90 days notice of cancellation or other notice in respect to the policy
- No cancellation (if available)
- Non-vitiating clause
- Unintended errors, omissions and misrepresentation
- Broad form occurrence property damage
- Directors, officers, employees, shareholders, legislators, members and other officials added as Insured or Additional insured
- Unlicensed equipment
- Excess automobile liability



22 June 2006

JARDINE LLOYD THOMPSON CANADA Inc.

- Watercraft cover up to 20M
- Tenants legal liability
- Fire fighting and forest fire fighting expense liability
- Hoist liability
- Sudden and Accidental Pollution
- Lenders as Named Insured
- Terrorism in accordance with the Terrorism Risk Insurance Extension Act 2005; Limit: USD50,000,000

Comments:

Certificates of Insurance and Policies Received

JLT confirms the documents:

1. Meets the requirements of the Loan Agreement and the ARCA
2. Are in line with market standard for a project of this size and type
3. Are consistent with JLT's advice regarding sensible levels of insurance coverage, deductible levels, and specific conditions
4. Provides adequate protection clauses for the Lenders

Automobile Liability (Primary and Umbrella)

The Operator shall as per the ARCA and Loan Agreement obtain Automobile Liability Insurance covering owned, non-owned or hired vehicles with a limit of not less than USD \$10,000,000 combined single limit or per occurrence for bodily injury and property damage liability.

Limit: USD 10,000,000

Key terms and conditions:

- Department named as a non-contributory Additional Insured
- 90 days notice of cancellation or other notice in respect to the policy
- No cancellation (if available)
- Non-vitiation
- Unintended errors, omissions and misrepresentation
- Maintenance of evidence of cover

Comments:



22 June 2006

JARDINE LLOYD THOMPSON CANADA Inc.

Evidence of Non-owned Automobile Insurance with a limit of USD 10,000,000 provided by Allianz letter dated 15 June 2006

No vehicles are owned by Transurban et al with respect to the operation of the Pocahontas Parkway

JLT confirms the documents:

1. Meets the requirements of the Loan Agreement and the ARCA
2. Are in line with market standard for a project of this size and type
3. Are consistent with JLT's advice regarding sensible levels of insurance coverage, deductible levels, and specific conditions
4. Provides adequate protection clauses for the Lenders

Directors and Officers Liability

Limit: USD 5,000,000

- Includes as Policy Holders
Transurban Limited
Transurban Holdings Limited
Transurban Infrastructure Management Limited
And all subsidiaries and controlled entities

Transurban (895) LLC
Transurban (895) Holdings Inc.
Transurban Finance Inc.
Transurban (895) US Holdings LLC ,

The Borrower as required by the Loan Agreement has provided to the Insurance Consultant a letter from Willis (an internationally recognized insurance broker acceptable to the Administrative Agent) which we have attached as an appendix to this report. The content of the Willis letter reflects Directors and Officers Liability cover that is adequate for a project of this size and nature.

Comments



22 June 2006

JARDINE LLOYD THOMPSON CANADA Inc.

Letter received from Willis Melbourne dated June 15 2006 confirming cover in place (attached).

JLT have reviewed the insurance letter to confirm that the coverage:

1. Meets the requirements of the Loan Agreement.
2. Is in line with market standard for a project of this size and type
3. The cover as represented in the Willis letter indicates a sensible level of cover.

Workers Compensation / Employers Liability

The Operator shall as per the ARCA and Loan Agreement obtain Worker's Compensation Insurance, as prescribed by Law, for all the Operator employees. Minimum limit of USD \$1,000,000 for Employers Liability and Parts A and B: Statutory for Virginia Workers Compensation.

Limit: USD 1,000,000

Key Terms and Conditions:

- As per all applicable statutory regulations

Comments:

JLT confirms that this coverage is not required as the Operator does not have any employees at this time.

The absence of this coverage:

1. Is consistent with the requirements of the Loan Agreement and the ARCA
2. Is in line with market standard for a project of this size and type

Non-owned Aviation

It is our advice that the Operator should obtain Non - owned Aviation Insurance with a limit of not less than USD \$100,000,000 if aircraft are to be chartered/hired during the course of the term.



22 June 2006

JARDINE LLOYD THOMPSON CANADA Inc.

Comments:

JLT confirms that this coverage is not required at this time.

The absence of this coverage:

1. Is consistent with the requirements of the Loan Agreement and the ARCA
2. Is in line with market standard for a project of this size and type

Builders Risks

The Borrower Parties shall as per the ARCA and the Loan Agreement obtain Builder's Risk Insurance subject to any development, engineering, procurement or construction contract being agreed when undertaking any construction, maintenance or repairs to the Project, including improvements and betterments. The Builder's Risk Insurance is to provide cover for replacement costs of materials, supplies, equipment, machinery and fixtures that are or will be part of the Project or used in the construction of the Project.

Such Insurance to cover the following;

- All Risk Course of Construction, including Delay in Start Up
- Terrorism and Sabotage
- Wrap Up Liability
- Contractors Plant and Equipment
- Professional Liability
- If required, Marine Cargo and Marine Cargo delay in Start Up
- If required, Non-Owned Aviation
- Statutory Workers Compensation/Employer Liability
- Statutory Automobile Liability

Comments:

Not required at this time

JLT confirms that this coverage is not required at this time as the Operator will not be undertaking any construction, maintenance or repairs to the Project, including improvements and betterments at this time. This insurance will be required by contractors that engage in these types of activities. The absence of this coverage:



22 June 2006

JARDINE LLOYD THOMPSON CANADA Inc.

1. Is consistent with the requirements of the Loan Agreement and the ARCA
2. Is in line with market standard for a project of this size and type



22 June 2006

JARDINE LLOYD THOMPSON CANADA Inc.

Lender's Insurance Clauses for the Loan Document

Below are clauses relevant to insurance that are recommended by JLT for projects of this size and risk profile. We confirm that they are adequately reflected in the Loan Agreement:

- Lender's Right to request Pocahontas Parkway specific policies
- Lenders Right to Insure
- Lender's Right to amend the Insurance Specifications in the Loan Agreement
- Lender's Right to Review, approve/disapprove and waive the insurance and/or reinsurance requirements including but not limited to the Limits of Liability, the Sums Insured, the insurers/reinsurers, Scope of Coverage and the Conditions
- Lender's Right to confirmation of Premium Payment
- Lender's Right to Notices and Communications
- Assignment of Insurance receivables from any indemnity, reimbursement or compensation for damages or losses of any nature or type that may arise under any of the policies of insurance
- Unavailability of insurance
- Lender's Right to a Claims Settlement Clause

June 28, 2006

APPENDIX 1

Pocahontas Insurers

Cover	Insurer and Policy No.	Document Received and Accepted	Certificate of Insurance or Policy Compliant with respect to ARCA and the Loan Agreement
Property – Surplus Lines from London (43.25% of USD310,000,000)	Various Policy No.'s WC0505446/7/8/9/50/1/64/3/7 June 23 2006 – December 31 2006	Certificate of Currency from AON Melbourne	Yes. The certified original policy copy confirming all the policy details is expected from Transurban within 45 days.
Property – US (48% of USD310,000,000)	XL Insurance Company of America Policy No. US00009761PROSA June 23 2006 – December 31 2006	Policy from XL Insurance Company of America	Yes
Property – US (8.75% of USD310,000,000)	Federal Insurance Company Policy No. 3583 09 29 June 22 2006 – December 31 2006	Blinder from Federal Insurance Company	Yes. The certified original policy copy confirming all the policy details is expected from Transurban within 45 days
Liability – Primary USD1,000,000	Allianz Global Risk US Insurance Company Policy No. CGL 2001699 June 23 2006 – January 1 2007	Policy from Allianz Global Risk US Insurance Company	Yes. The certified original policy copy confirming all the policy details is expected from Transurban within 45 days.

Cover	Insurer and Policy No.	Document Received and Accepted	Certificate of Insurance or Policy Compliant with respect to ARCA and the Loan Agreement
Liability – Umbrella USD30,000,000	Allianz Global Risk US Insurance Company Policy No. ULA 2001700 June 23 2006 – January 1 2007	Policy from Allianz Global Risk US Insurance Company	Yes. The certified original policy copy confirming all the policy details is expected from Transurban within 45 days.
Liability – Excess USD19,000,000	American International Underwriters Policy No. 8766336 June 23 2006 – December 31 2006	Blinder form American International Underwriters	Yes. The certified original policy copy confirming all the policy details is expected from Transurban within 45 days
Liability – Difference in Conditions USD50,000,000	Allianz Australia Insurance Limited Policy No.'s 99 0000332LGR 99 0000333LGR June 23 2006 – December 31 2006 American Home Assurance Company Policy No. 90245	Policy Endorsements	Yes
Directors and Officers USD5,000,000	December 31 2005 – December 31 2006 American Home Assurance Company, Chubb Insurance Company of Australia Limited, ACE Insurance Limited and QBE Insurance (Australia) Limited	Letter from Willis Australia Ltd. Confirming a robust program is in place in respect to	Yes

Cover	Insurer and Policy No.	Document Received and Accepted	Certificate of Insurance or Policy Compliant with respect to ARCA and the Loan Agreement
	December 31 2005 – December 31 2006	Directors and Officers Liability. AUD \$ 100,000,000	

APPENDIX 2

Transurban Group Insurers 2006

1. ISR

Insurer	Location	Rating	Rating Agency
United Kingdom			
XL Insurance Company	Sydney	A	A+ g XV
Liberty International Underwriters	Melbourne	A	A p XV
QBE Insurance (Australia) Limited	Melbourne	A+	N/A
Chubb Insurance Company of Australia Limited	Melbourne	AA	A++ g XV
United States of America			
Great Lakes Reinsurance (UK) Plc (MARP)	London	A +	A+ g XV
Sirius International Insurance Group	London	A -	A g XI
SR International Business Insurance Company Ltd (Swiss Re)	Zurich	AA (neg)	A+ gu XV
Endurance Worldwide Insurance Ltd	London	A -	A- g XV
Scor UK Company Ltd	London	A -	B++ g XV
Houston Casualty Company	London	AA	A+ g XI
Ace European Markets Insurance Ltd	London	A +	A+ r XV
Allied World Assurance Company (Europe) Ltd	London	A+ (A.M.Best)	A ru XIV
United States of America			
Liberty 4472, Catlin 2003, Beasley 2623/0623, Hiscox 0033, MAP 2791, Broadgate 1301, Chaucer 1064, Kiln 0510, Talbot 1183, Heritage 1200, Cathedral 2010, Ace Global Markets 2486	London	A	N/A

2. Public Liability

Company	Location	Rating	Rating Agency
Allianz Global Risks (Primary)	Sydney	A+	A g XV
Allianz Global Risks (Umbrella)	Sydney	A+	A g XV
American Home Assurance Company (1 st Excess umbrella)	Melbourne	AA	A+ pu XV
ACE Insurance Limited (2 nd Excess Umbrella)	Melbourne	A	A+ p XV

3 Ancillary Lines

Company	Location	Rating	Rating Agency
Accident & Health International (Allianz) – Corporate Travel	Melbourne	A	N/A
ACE Insurance Limited – Expatriate Medical	Melbourne	A	A
CGU (IAG) – Corporate Motor	Melbourne	AA	N/A

Transurban (895) LLC Property/Business Interruption Program Structure

AON

Direct		Surplus Lines		
XL Insurance America	Federal Insurance	Excess	SR Front End	Global Limits
<p>43.0%</p> <p>Notes: XL Insurance currently insulates holders from any payment by ex-ante payment member's fully being</p> <p> CGL 10.0% Liability 12.0% S&A 3.5% F&E 3.0% </p>	<p>3.75%</p>	<p> Liability 3,500,000 CGL 1,000,000 Auto 2,000,000 Marine 2,500,000 Fire 1,000,000 </p>	<p>100%</p>	<p>100%</p>
<p>SECTION 1 - MATERIAL LOSS DAMAGE</p> <p>US\$ 1,500,000 in respect to Earth Movement, Flood and Named Windstorm</p> <p>US\$ 500,000 in respect to Roads and Bridges and Associated Property</p> <p>US\$ 100,000 in respect to Buildings/Contents and all other losses</p> <p>US\$ 500,000 in respect to TRIA</p>		<p>DEDUCTIBLES:</p> <p>SECTION 2 - BUSINESS INTERRUPTION</p> <p>US\$ 350,000 each claim</p> <p>US\$ 350,000 each claim in respect to TRIA</p>		

Note: Difference in Conditions and Difference in Sub-limits cover is provided over the direct policies by XL Australia and the reinsurers and Chubb Australia

US\$75m

28 June 2006

APPENDIX 4

**TRANSURBAN (895) LLC
Commercial General Liability Program Structure**

USD 50,000,000



USD 19M Excess

DUFF & PHELPS, LLC

Jon Blackie
Managing Director
1221 Avenue of the Americas
New York, NY 10020
Tel: 212-512-2486
jon.blackie@duffandphelps.com

22 June 2006

Private and Confidential

Mr. Wesley Ballantine
Manager, Corporate Finance
Transurban (USA) Development Inc.
405 Lexington Ave, 43rd floor
New York
NY 10174

Together with the parties listed in appendix A, attached hereto.

Pocahontas Parkway Acquisition: Review of Financial Model

Dear Sirs and Madam:

In accordance with our engagement letter ('Engagement Letter') with Transurban (USA), Inc. (the "Company") and the parties listed in appendix A, hereto (the "MLAs"; collectively the "Clients"), dated 12th June 2006, we designed and conducted model review procedures, using reasonable skill and care, in the context of your requirements, of the base case financial model, (the 'Model'; *version filename: PPA FM v 5.09 (22Jun06)c.xls, dated 22 June 2006, size 16,210KB*). The scope and limitations to the scope of our work are described in detail in the Engagement Letter, attached at appendix B.

The Model

The Model has been developed by DEPFA Bank Plc ("DEPFA") to assist the Company in the raising of equity and debt finance in connection with the agreement to acquire the rights and obligations to manage, operate, maintain and collect tolls on the Pocahontas Parkway (the "Project").

The objective of the Model is to generate projected profit and loss accounts, balance sheets, cash flow statements, internal rates of return, certain debt gearing and coverage ratios of the project company on a semi-annual basis for the period until 22 June 2105 on the basis of the key assumptions and input data included in the base case Model and outlined in the Model's 'Assum Book' sheet.

Our Report

The Engagement Letter and this report ("Report") is addressed to, and intended for the sole use by the Clients. We do not accept any responsibility to any other party to whom our report is shown or into whose hands it may come other than the Clients as specifically identified in appendix A in our Engagement Letter. Whenever our Report is provided to third parties, the Engagement Letter must be attached in full as an appendix to the Report. In no event, regardless of whether consent has been provided, shall we assume any responsibility to any third party to which the Report is disclosed or otherwise made available.

The Addressees will be responsible for distributing the report to the Clients. Our report should not be shown to any other party. If any Client wishes to show our report to any other party, such Client must first obtain our prior written consent; such consent not to be unreasonably withheld. This report should not be used or relied upon for any other purpose or by any other party other than the Clients. When we consent to our review work being described to third parties, those third parties should be provided with the full text of our report.

Selected outputs of the Model are shown as appendix F, which identify the base case model we reviewed. The scope and limitations to the scope of our work, including our terms of business, are included in our engagement letter, attached as appendix B.

Our Opinion

In our opinion, based upon the work we have performed:

- i). The Model has been constructed appropriately, in so far as its logical integrity and arithmetic is concerned, so as to materially achieve the objective described above under the base case assumptions;
- ii). The Model has been constructed appropriately, in so far as their logical integrity and arithmetic is concerned, so as to materially achieve the objective described above after adjusting the base case assumptions and input data to reflect certain designated sensitivities (the 'Designated Sensitivities');
- iii). The key assumptions and input data set out in the data sheet, included in the Model as the "Assum Book" sheet, have been properly input into the Model;
- iv). The key macros included in the Model have been written appropriately to support the operation of the base case Model;
- v). The Model reflects the key financial provisions included in the relevant extracts of the key project agreements, as identified in appendix C, to the extent that they are material to the Model achieving its objective;

- vi). The method of calculation of tax charges and associated liabilities and payments contained in the Model is materially consistent with our understanding of the current provisions of US State and Federal tax legislation, under the base case assumptions; and the Designated Sensitivities;
- vii). The key accounting assumptions in the Model are materially consistent with our understanding of current US generally accepted accounting practice, under the base case assumptions and for the Designated Sensitivities;
- viii). There are no breaches of the DSCR and LLCR covenants, as defined in the Relevant Extracts, in the base case Model; and
- ix). The Model contains no formulae that are linked to external Excel files, as identified by Excel's in-built link tool.

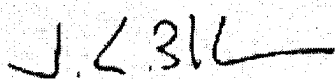
Other Matters

DEPFA, acting as Financial Advisor to the Company, will retain responsibility for the preparation and contents of the Model and for the projections contained in them.

Our opinion is not intended to provide comfort that the financial projections generated by the Model will be achieved. Rather, the Model simply illustrates the possible results of the Project if the assumptions set out in the Model were to be correct. The Model's financial projections may be materially affected by changes to economic, financial, tax, accounting or other circumstances, or when the assumptions upon which the Model is based change.

In performing our review of the Model, we have relied upon certain explanations provided by DEPFA on behalf of the Clients in response to our comments and questions raised during the course of our review. All significant comments raised during the course of our work together with DEPFA's responses, are attached at appendix E.

Yours faithfully,



By: JON BLACKIE
Managing Director
Duff & Phelps, LLC

Appendices

A	Additional Addressees
B	Engagement Letter
C	Relevant Extracts from the Project Documents
D	Designated Sensitivities
E	Significant Comments and Responses
F	Key Base Case Model Outputs

**Pocahontas Parkway Acquisition:
Financial Model Review**

**Appendix A
Additional Addressees**

Mr. Michael Kulper
Manager, Corporate Finance
Transurban (USA) Development Inc.
405 Lexington Ave, 43rd floor
New York
NY 10174

Messrs. Mark Tubb and Andrew Mathews
HVB Capital Markets, Inc.
150 East 42nd Street
New York
NY 10017
USA

Ms. Sally Stott
Banco Espirito Santo de Investimento S.A.
London Branch
33 Queen Street
London
EC4R 1ES
UK

Mr. Conor Kelly
DePfa Bank Plc
623 5th Avenue (22nd Floor)
New York
NY 10022

Pocahontas Parkway Acquisition:
Financial Model Review

Appendix B
Engagement Letter

DUFF & PHELPS, LLC

Jon Blackie
Managing Director
1221 Avenue of the Americas
New York, NY 10020
Tel: 212-512-2486
jon.blackie@duffandphelps.com

12 June 2006

Private and Confidential

Mr. Wesley Ballantine
Manager, Corporate Finance
Transurban (USA) Development Inc.
405 Lexington Ave, 43rd floor
New York
NY 10174

Together with the parties listed in appendix B, attached hereto.

Pocahontas Parkway Acquisition: Review of Financial Model

Dear Sirs:

We are writing to confirm the terms of our engagement by Transurban (USA), Inc (the "Company") and the parties listed on appendix B hereto (the "MLAs") (collectively, the "Clients") regarding review by Duff & Phelps LLC ("D&P" or "Duff & Phelps") of the Pocahontas Parkway acquisition financial model (*version filename: PPA FM v 5.07 - 6 13 06.xls, dated 15 June 2006, size 17,198KB, as updated*) (the "Model"). The Company represents that the Model has been developed by DEPFA Bank Plc ("DEPFA") to assist the Company in the raising of equity and debt finance in connection with the agreement to acquire the rights and obligations to manage, operate, maintain and collect tolls on the Pocahontas Parkway (the "Project").

This letter, together with the attached appendices (collectively, the "Agreement", or "Engagement Letter"), sets forth the terms and conditions on which Duff & Phelps will perform certain financial model review services as more fully described in appendix A (collectively, the "Services") for the Clients.

Our Report

Recipients

D&P's report will be addressed to the Clients. Any report issued by us is provided solely for the Clients' use and benefit (except as provided herein) and only in connection with the Services that are provided.

Third party access

Unless required by law and except as provided below, the Clients shall not provide such Report to any third party or refer to us or the Services without our prior written consent, which we may at our discretion grant, withhold, or grant subject to conditions; provided however, that the Clients and their respective officers, directors and control persons may offer such report as evidence in defence of any third party claim relating to or arising from the Project, or in connection with any dispute arising between the parties hereto.

Such consent shall not be unreasonably withheld by D&P. In instances where we do consent, we will require each third party to agree, in writing, to certain conditions before they may be given access to the Report. An example of this agreement is attached to this letter as attachment 1. In no event, regardless of whether consent has been provided, shall we assume any responsibility to any third party to which the Report is disclosed or otherwise made available.

Reliance

We will be willing, at your request to make our Reports available (or to permit you to make them available) to other institutions, banks, or co-investors who may be or become involved in financing the Project provided that they first accept the terms of a letter in the form of attachment 2, thereby agreeing to the terms of this Engagement Letter as if they had been named as addressees. We will not unreasonably delay or withhold our consent in relation to additional parties who seek to rely on our report, subject to them signing the attached reliance letter. It should be noted that the form of the reliance letter may need to be amended in the event that the party seeking reliance is an existing client of Duff & Phelps or a subsidiary or affiliate of a client of Duff & Phelps. The terms of attachment 2 remain subject to the comments that the parties seeking to be named as additional addressees may have.

Draft reports and interim comments

During the course of our engagement we may show a draft of our Report to you. This is done on the basis that a draft Report is subject to revision and alteration and no reliance should be placed on any working draft document. Informal oral comments made in discussions with you about any Report or draft Report will not have any significance and reliance should only be placed on information and comments set out in the written Report.

In performing its review, D&P may identify and comment on matters which may be of interest to the Clients, but which would otherwise fall outside the agreed scope of D&P's work. By reporting such matters to the Clients, this is not intended to extend the agreed scope of D&P's work and D&P accepts no responsibility for conducting additional testing to ensure that all similar matters are brought to the Clients' attention.

Other

Subject to the foregoing, each of the Clients agrees that D&P's work will not be described, or referred to by any of the Clients, in documents provided to third parties without D&P's prior written consent; such consent not to be unreasonably withheld. When D&P's review work is described to third parties, those third parties should be provided with the full text D&P's report (subject to obtaining D&P's prior written consent; such consent not to be unreasonably withheld).

D&P will attach this engagement letter in full as an appendix to its report. Whenever D&P's report is provided to third parties, this appendix must be reproduced and attached.

Personnel

Jon Blackie, Managing Director, will act as the engagement leader for this assignment with overall managerial responsibility for the services provided to you. Jon will be supported by members from our financial modelling team, as required.

DEPFA, acting as Financial Advisor to the Company, will have overall responsibility for directing D&P in this assignment and will act as first point of contact for the D&P team.

Fees

Our standard hourly rates are shown in the table below:

Grade	Rate/hr USDS
Managing Director	\$750
Vice President	\$525
Manager	\$475
Senior Associate	\$395
Associate	\$280

Our fees are based on our assessment of the size and complexity of the Model and the scope of work outlined in Appendix A.

Based upon your requirements our fees will be as follows:

Work Performed	Notes	Fee
Initial base case model review		\$31,500
Review of macros included in the base case model		\$2,000
Initial model re-review (model version 2)		\$4,000
Sensitivity cases (assuming 10 cases)		\$5,000
Documentation checks		\$5,000
Attendance at financial close meeting	1	\$3,000
Subsequent model update reviews (versions 3 and 4)	2	\$9,000
		<hr/>
		\$59,500
Taxation model review (if required)		\$5,000

- (1) Attendance at other meetings will be charged separately using discounted hourly rates, agreed, in advance, with you
- (2) Refer to Attachment 1 (section 3) for further terms concerning model updates.

Taxes and expenses

Our fees exclude applicable sales taxes and any reasonable out of pocket expenses, some of which will be allocated, that we may incur. Allocated expenses include the costs of administrative items such as telephone, research material, facsimile, overnight mail, messenger, administrative support among others, and are calculated at 9% of our fees summarised above. Direct expenses include reasonable and customary out-of-pocket expenses for items such as travel, meals, accommodations and other expenses specifically related to this engagement.

Variations

Our performance of the Services is dependent upon you providing us with accurate and timely information and assistance as we may reasonably require from time to time. You shall use reasonable skill, care and attention to ensure that all information we may reasonably require is provided on a timely basis and is accurate and complete. You shall notify us if you subsequently learn that the information provided is incorrect or inaccurate or otherwise should not be relied upon. The inability to supply us with the agreed upon information in a useable form within an agreed timetable may increase fees and delay completion. Additionally, in the event unforeseen complications are encountered which would significantly increase fees, we would discuss these with you.

Either D&P or the Company on behalf of the MLAs may request changes to the Services. We shall work with you to consider and, if appropriate, to vary any aspect of the Agreement, subject

to payment of reasonable additional fees and a reasonable additional period to provide any additional Services. Any variation to this Agreement, including any variation to fees, services, or time for performance of the Services, shall be set forth in a separate agreement executed by both D&P and the Clients which shall form part of this Agreement.

We understand that you may require us to perform additional sensitivities for syndication purposes, which we would be happy to undertake, in a timely manner at the same standard hourly rates as detailed above.

Payment

The Company is responsible for payment of our fees. We will bill the Company on a monthly basis, or upon financial close, if sooner. Our invoices are payable upon receipt. If we do not receive payment of any invoice within 60 days of the invoice date, we shall be entitled, without prejudice to any other rights that we may have, to suspend provision of the Services until all sums due are paid in full.

If any amounts payable hereunder are not paid within thirty (30) days when due, such amounts shall accrue interest at a rate equal to the lesser of two percent (2%) per month or the highest interest rate permitted under the applicable laws of the state of New York. In the event that we are required to initiate a lawsuit or hire attorneys to collect any past due amounts, in addition to any other rights and remedies available to us, we shall be entitled to reimbursement of our attorneys fees and other costs of collection.

Other Matters

The performance of the Services and the parties' obligations in connection therewith are subject to the additional terms and conditions set forth in appendix C.

This Engagement Letter constitutes the entire agreement between the parties hereto regarding the subject matter hereof and supersedes any prior agreements (whether written or oral) between the parties regarding the subject matter hereof.

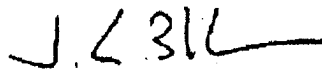
This Engagement Letter shall be governed by and interpreted in accordance with the internal laws of the State of New York and the courts of the State of New York shall have exclusive jurisdiction in relation to any claim arising out of this Engagement Letter.

Acknowledgement and Acceptance

If the scope and terms of the engagement are acceptable, please acknowledge your acceptance by signing the confirmation attached, returning the enclosed copy of this letter to the above address.

If you have any questions or amendments, please do not hesitate to contact me.

Yours faithfully,

A handwritten signature in black ink, appearing to read 'J. Blackie', with a horizontal line extending to the right.

By: Jon Blackie
Managing Director
Duff & Phelps, LLC

APPENDIX A

Scope of Services, Respective Responsibilities and Additional Understandings

1. Scope of our work

The objective of the Model is to generate projected profit and loss accounts, balance sheets, cash flow statements, internal rates of return, certain debt gearing and coverage ratios of the project company on a semi-annual basis for the period until 31 December 2105 on the basis of the key assumptions and input data included in the base case Model and outlined in the Model's 'Assum Book' sheet (the 'Data Book').

You have asked us to undertake a review of the Model to assist you in determining whether:

- i). The Model has been constructed appropriately, in so far as its logical integrity and arithmetic is concerned, so as to materially achieve the objective described above under the base case assumptions;
- ii). The Model has been constructed appropriately, in so far as its logical integrity and arithmetic is concerned, so as to materially achieve the objective described above after adjusting the base case assumptions and input data to reflect certain designated sensitivities (the 'Designated Sensitivities') if required and defined;
- iii). The key assumptions and input data set out in the data sheet, included in the Model as the "Assum Book" sheet, have been properly input into the Model;
- iv). Key macros included in the Model have been written appropriately to support the operation of the base case Model;
- v). The key financial provisions of specified extracts from certain Project Agreements and Financing Documents (the 'Relevant Extracts'; to be defined) have been appropriately represented in the Models to the extent that they are material to the Models achieving their objective under the base case assumptions and for the Designated Sensitivities.

Using the project documents that you have provided to us, we will compile a list of all financial provisions and other extracts that we consider relevant and material to the Model. If, during the course of our review, we become aware of material assumptions or information included in the Model that are not included in the Relevant Extracts, we will request such information from you and include these additional extracts in the Relevant Extracts. The Relevant Extracts will be approved by the MLAs and we will be appended to our final Report.

Our work in respect of our review of the Relevant Extracts shall be limited to financial data, terms and provisions, as identified by you and anticipated to include, *inter alia*, the following document extracts:

- a) Lifecycle and maintenance costs provided and/or reviewed by the Lenders' Technical Advisor
 - b) Traffic assumptions provided by the Lenders' Traffic Advisor
 - c) Insurance costs provided and/or reviewed by the Lenders' Insurance Advisor
 - d) The definitions of all relevant financial covenant and ratio tests, including Loan Life Cover (LLCR), Debt Service Cover (DSCR), Interest Cover as well as terms related to the various reserve and security accounts and instruments including, Total Debt Service Reserve Account, Maintenance Reserve Account, Demand and Affiliate Subordinated Loans and the Distribution Account;
 - e) The terms of repayment of the debt and equity (including subordinated loans) including the calculation of interest, cash sweeps and any restrictions, such as lock-up provisions, associated with each form of funding such that these are adequately reflected in the Designated Sensitivities as well as the Base Case Model.
- vi). The method of calculation of tax charges, depreciation and associated liabilities and payments contained in the Model is materially consistent with our understanding of the current provisions of US State and Federal tax legislation, under the base case assumptions. The taxation assumptions included in the memorandum provided by the MLA's tax advisor have been appropriately represented in the Model to the extent that they are material to the Model achieving its objective under the base case assumptions and for the Designated Sensitivities
- vii). The key accounting assumptions in the Model are materially consistent with our understanding of current US generally accepted accounting practice, under the base case assumptions and for the Designated Sensitivities;
- viii). There are no breaches of the DSCR and LLCR covenants, as defined in the Relevant Extracts, in the base case Model; and
- ix). The Model contains no formulae that are linked to external Excel files, as identified by Excel's in-built link tool.

We will also attend the financial close meeting, scheduled for 15th June 2006.

2. Limitations to the scope of our work

You do not require us to perform any of the following:

- i). Verify any of the assumptions, judgements and commercial risks associated with the project, nor comment upon the possibility of the financial projections being achieved, nor verify the commercial merits, technical feasibility or compliance with applicable

legislation of the Project;

- ii). Review any other versions of the models other than the base case and the Designated Sensitivities;
- iii). Assess whether the financial statements are presented in a format (including disclosure notes that may be required) that would be suitable for public financial reporting or acceptable to taxation authorities; nor
- iv). Assess the accuracy and correctness of the software or operating system within which the Models operate.

3. Update reviews

We have assumed that you require us to perform one detailed review of the model shortly followed by up to three update reviews should any changes be made subsequent to our initial review (referred to as versions 2, 3 and 4 in our Fees section above). You do not expect that the extent of such changes will be significant. You accept that a model update is significant where there has been more than a **10%** cumulative change in the Model's formulae from the initial model version we review. Should you require, we will be pleased to review additional versions of the Model or more significant model updates, with any such additional professional time being charged at our standard hourly rates and agreed in advance with you.

APPENDIX B

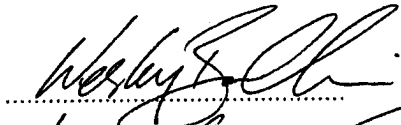
Addressees and Confirmation of Terms of Engagement

Having read this Letter of Engagement from Duff & Phelps LLC dated 12 June 2006, we acknowledge acceptance of and agree to engage Duff & Phelps LLC upon the terms of the same.

I hereby acknowledge my understanding of and confirm our agreement to the terms of the above letter and the enclosed terms and conditions.

Mr. Wesley Ballantine
Manager, Corporate Finance
Transurban (USA) Development Inc.
405 Lexington Ave, 43rd floor
New York
NY 10174

Signed


.....
MANAGER, CORPORATE FINANCE.

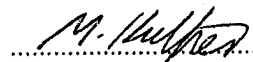
Position

Date

6/21/06

Mr. Michael Kulper
Manager, Corporate Finance
Transurban (USA) Development Inc.
405 Lexington Ave, 43rd floor
New York
NY 10174

Signed


.....

Position

VICE PRESIDENT

Date

6/21/06

Additional parties

I hereby acknowledge my understanding of and confirm our agreement to the terms of the above letter and the enclosed terms and conditions.

Messrs. Andrew Leon and Andrew Mathews
Bayerische Hypo- und Vereinsbank AG, New York Branch
150 East 42nd Street
NY 10017 New York

Signed
Position
Date

Ms Sally Stott
Banco Espirito Santo de Investimento S.A.
33 Queen Street
London
EC4R 1ES

Signed
Position
Date

Mr Conor Kelly
DePfa Bank Plc
623 5th Avenue (22nd Floor)
New York, NY 10022

Signed
Position
Date

Additional parties

I hereby acknowledge my understanding of and confirm our agreement to the terms of the above letter and the enclosed terms and conditions.

Messrs. Andrew Leon and Andrew Mathews
Bayerische Hypo- und Vereinsbank AG, New York Branch
150 East 42nd Street
NY 10017 New York

Signed

Position

Date

Ms Sally Stott
Banco Espirito Santo de Investimento S.A.
33 Queen Street
London
EC4R 1ES

Signed 

Position DIRECTOR

Date 22/6/06

Mr Conor Kelly
DePfa Bank Plc
623 5th Avenue (22nd Floor)
New York, NY 10022

Signed

Position

Date

Additional parties

I hereby acknowledge my understanding of and confirm our agreement to the terms of the above letter and the enclosed terms and conditions.

Messrs. Andrew Leon and Andrew Mathews
Bayerische Hypo- und Vereinsbank AG, New York Branch
150 East 42nd Street
NY 10017 New York

Signed

Position

Date

Ms Sally Stott
Banco Espirito Santo de Investimento S.A.
33 Queen Street
London
EC4R 1ES

Signed

Position

Date

Mr Conor Kelly
DePfa Bank Plc
623 5th Avenue (22nd Floor)
New York, NY 10022

Signed 

Position Managing Director

Date 6-22-06

APPENDIX C

Terms of Business

Termination

Either D&P or the Company, on behalf of the MLAs, may terminate this Engagement Letter in the event that the other party has breached any material provision of this contract and such breach has not been cured within ten (10) days after receipt of written notice from the then non-breaching party.

Upon termination of this Engagement Letter, each party shall, upon written request from the other, return to the other all property and documentation of the other that is in its possession, except that the parties hereto shall each be entitled to retain one copy of such documents as part of their internal document retention policies in order to maintain a professional record of our involvement in the engagement, subject to our continuing confidentiality obligations hereunder.

The provisions included within "Fees", "Preservation of Confidential Information", "Indemnification" and "Other Terms and Provisions" shall survive the termination or expiration of this Letter of Engagement.

Preservation of Confidential Information

No party will disclose to any third party without the prior written consent of the other party any confidential information which is received from the other party for the purposes of providing or receiving Services which if disclosed in tangible form is marked confidential or if disclosed otherwise is confirmed in writing as being confidential or, if disclosed in tangible form or otherwise, is manifestly confidential. D&P and the Clients agree that any confidential information received from the other party shall only be used for the purposes of providing or receiving Services under this or any other contract between us.

These restrictions will not apply to any information which: (a) is or becomes generally available to the public other than as a result of a breach of an obligation by the receiving party; (b) is acquired from a third party who owes no obligation of confidence with respect to the information; or (c) is or has been independently developed by the recipient without reference to or use of any confidential information.

Notwithstanding the foregoing, either party will be entitled to disclose confidential information of the other (i) to our respective insurers and legal and financial advisors, or (ii) to a third party to the extent that this is required, by any court of competent jurisdiction, or by a governmental or regulatory authority or where there is a legal right, duty or requirement to disclose. However, to the extent legally permissible, before either party makes any disclosure under this clause, it must provide the owner of the confidential information with prompt written notice of the requirement to disclose to enable the owner of the confidential information to seek an appropriate protective

order or to take steps to resist or narrow the scope of the requirement to disclose the Confidential Information.

Indemnification

Any Clients agrees to indemnify and hold harmless Duff & Phelps, its affiliates and their respective employees from any and all third party claims, liabilities, losses, costs, demands and reasonable expenses, including but not limited to reasonable legal fees and expenses, internal management time and administrative costs, relating to Services we render under this Engagement Letter, to the extent such member is responsible for such third party claims, liabilities, losses, costs, demands and reasonable expenses. The foregoing indemnification obligations shall not apply in the event that a court of competent jurisdiction finally determines that such claims resulted directly from the gross negligence, wilful misconduct, or fraudulent acts of Duff & Phelps.

Our Liability

The Clients acknowledge and agree that in no event shall D&P be liable to the Clients (or any person claiming through the Clients) under any legal theory for any damages under this Letter of Engagement except to the extent it is finally determined by a court of competent jurisdiction that we have engaged in negligence, wilful misconduct or fraud. Furthermore, in the event that liability is imposed on us under this Letter of Engagement, in no event shall we be liable to the Clients (or any person claiming through the Clients), under any legal theory, for any amount in excess of \$750,000, to us under this Letter of Engagement or any addendum to which the claim relates, or for any consequential, indirect, lost profit or similar damages relating to or arising from our Services provided under this Letter of Engagement.

Notwithstanding the preceding paragraph, all Clients, including the Company, acknowledge and accept that the rights of the Company in respect of any claim against Duff & Phelps, shall be subordinated to the rights of the MLAs and any additional parties who have signed the attached reliance letter and seek to rely on our report.

The Clients accept and acknowledge that any legal proceedings arising from or in connection with this Engagement (or any variation or addition thereto) must be commenced within one year from the date when the Companies become aware of the facts which give rise to our alleged liability and in any event not later than two years after any alleged breach of contract or act of gross negligence or commission of any other tort. The Clients also agree that no action or claims will be brought against any D&P employees personally or against any other persons involved in performance of this engagement, whether actual or deemed servants or agents of us or not.

The Clients accept and acknowledge that we have not made any warranties or guarantees, whether express or implied, with respect to the Services or the results that the Clients may obtain as a result of the provision of the Services, other than in connection with our performance of the Services in accordance with appropriate and customary professional standards.

In no circumstances shall we be liable, other than in the event of our negligence or wilful misconduct, for any loss or damage, of whatsoever nature, arising from information material to our work being withheld or concealed from us or misrepresented to us by the directors, management, employees, or agents of the target or any other person of whom we may make enquiries. This clause, and any assessment of our work made pursuant to it, will have regard to the scope of procedures agreed under this Engagement Letter.

Circular Logic

Circular logic is present in a spreadsheet when the inputs to a calculation depend directly or indirectly on the results of that calculation. This may require that a calculation is performed many times in succession, as output results are repeatedly recycled as inputs. Circular logic usually occurs because a model includes a circular reference in the coding of the spreadsheet formulae or through the use of iterative techniques; such as 'copy and paste' macros or goal seek.

In general, when a model employs circular logic, it is not possible to mathematically demonstrate that the underlying numerical problem has a unique solution, leading to a degree of uncertainty in the Model's results. Accordingly, where D&P determines that the model contains circular logic, D&P will highlight this clearly in its report. In any event, once highlighted, if the circularity is not removed, D&P accepts no responsibility for uncertainty or errors arising in the case that the Clients choose to employ a model that utilises circular logic.

Designated Sensitivities

A Designated Sensitivity is a variation to a model to assess possible outcomes when variables, which cannot be estimated with a reasonable degree of certainty, take alternative values. In some circumstances, a Designated Sensitivity is a variation to represent an alternative business option (for example, an alternative financing structure), rather than to assess the potential effects of uncertain estimates. This type of Designated Sensitivity may be referred to as a 'scenario' and will require a more detailed review by us.

Where D&P is required to review sensitivity cases, D&P will be unable to commence its detailed review of these versions of the Model until our review base case model is complete, all material and agreed amendments arising from D&P's review findings have been processed.

Intellectual Property Rights

We retain all copyright and other intellectual property rights in everything developed, designed or created by us, or any predecessor firm, either before or during the course of an engagement including systems, methodologies, software, know-how and working papers. We also retain all

copyright and other intellectual property rights in all reports, written advice or other materials provided by us to you.

General

The decision as to whether to consummate the Project lies solely with the Clients. Our work and our findings shall not in any way constitute a recommendation as to whether the Clients should or should not proceed with the Project described above. Further, our Report should not be taken to supplant the additional enquires and procedures that should be undertaken in your consideration of the proposed Project.

Responsibilities

We are responsible for planning and performing a review of the Model, in the context of your requirements, and reporting to you on that basis in respect of those particular points set out in our scope of work. Our review procedures are tailored to the complexity and structure of each model but will typically include a line-by-line coding integrity review, certain analytical review procedures and discussions with the Company.

The Company retains full responsibility for the preparation and contents of the Model and for the projections contained in them.

The Company agrees that it will inform D&P on a timely basis of all significant Model defects of which either the Company is aware when D&P commences its work, or with regard to which the Company subsequently becomes aware during the course of D&P's review.

Other Matters

The Model is built using Microsoft Excel software. We assume no responsibility for such software and we will not carry out any enquiry into, or review of, the software within which the models operate. It is your responsibility to ensure that this software is suitable for your needs, including that it can interact with all other systems and applications that it may be required to interact with and that the software does not have any inherent defects. Accordingly, we shall have no responsibility for the consequences of any inherent defect in such computer software programs..

Neither D&P nor the Clients will be liable to the other for any delay or failure to fulfil obligations caused by circumstances outside our reasonable control.

We reserve the right to use the Clients' name in marketing materials as part of a representative list of clients for whom we have provided services.

The Clients agree that they shall not, during the term of this Agreement and for 12 months following its termination for any reason, solicit for employment (other than through general print

solicitations not targeted at Duff & Phelps), or hire (except as a result of such general solicitations), any Duff & Phelps personnel involved in the performance of the Services, except as otherwise agreed in writing by D&P.

The Report is designed to provide you with certain recommendations for your further consideration and evaluation of the Project in light of all other available information. It should not be used as the sole source upon which you rely in making important financial or other decisions and should not be taken to replace other inquiries and procedures that you should undertake for the purpose of satisfying yourself regarding such decisions.

**ATTACHMENT I:
THIRD PARTY ACCESS TO THE REPORT**

[Date]

[Addressee (e.g., bank or third party investor)]

Dear [Addressee]:

We have been informed that [Bank or third party investor name] ("Bank") wishes to obtain access to our report ("Report") regarding the proposed transaction. We have received authorisation from [] (the "Clients") to allow Bank such access to the Report.

The report was drafted solely for the Clients, intended only for distribution to the Clients and is subject to many limitations. Accordingly, we request that you acknowledge that you concur with the extent of the scope and procedures we performed and understand their limitations by counter signature to this letter. The Report should not be taken to supplant other inquiries and procedures that Bank should undertake for the purpose of satisfying itself regarding Target or for any other purpose.

In consideration of Duff & Phelps, LLC allowing Bank access to the Report and to the information contained therein, Bank agrees that it does not acquire any rights as a result of such access that it would not otherwise have had and acknowledges that Duff & Phelps, LLC does not assume any duties or obligations in connection with such access. Further, Bank represents to Duff & Phelps, LLC that it will not rely on the report and will make no claim that it has done so. Bank also agrees that it will make no claims against Duff & Phelps, LLC, its partners or its personnel as a result of Duff & Phelps, LLC's consent to Bank's access to the Report and any discussion of its contents.

Further, except as required by law, Bank agrees that the Report (including the information acquired as a result of its review of the Report) will not be further distributed by Bank.

Should Bank breach its agreement not to further distribute the Report, Bank agrees that to the extent permitted by law, it will indemnify and hold harmless Duff & Phelps, LLC, its partners and its personnel, from any claim and expense (including attorneys' fees) that is asserted based on the Report (excepting only a claim by the Clients) and that arises as a result of such breach.

Please confirm your agreement with the foregoing by signing and dating a copy of this letter and returning it.

Very truly yours,

<MD name>
Duff & Phelps, LLC

Agreed to and accepted by:

Legal name of third party

Signed

Position/company

Date

ATTACHMENT II:

The Directors

[Name of bank/Co-investor]

[Address of the bank/Co-investor]

Private and confidential

Dear Sirs

Project name

We are writing in connection with our report ("Report") on *[Target]* dated *[Date report]* prepared by us at the request of <client> pursuant to an engagement letter (the "Engagement Letter") dated *[Date]*, a copy of which is attached to this letter. Unless otherwise defined in this letter terms defined in the Engagement Letter shall have the same meaning when used in this letter.

Client has requested that *[Bank]/[Co-investor]* ("Bank")/("Co-investor") is treated as an addressee of, and a party to, the Engagement Letter and as an addressee of the Report. We are prepared to do this on the basis that Bank/Co-investor first acknowledges and accepts the points set out below.

After our Report is issued, we are prepared to treat Bank/Co-investor as an addressee of the Engagement Letter and our Report, provided that (a) complete copies of our Report and the Engagement Letter are provided in confidence to Bank/Co-investor and (b) Bank/Co-investor agrees by signing this letter to be unconditionally bound by the terms of this Engagement Letter (including the obligation and liability provisions but excluding the obligation to pay our fees and the non solicit obligation contained in the Engagement Letter) and accepts in this letter that:

1. Our Report will not have had Bank's/Co-investor's needs and interest in mind to the extent that they differ from those set out in the Engagement Letter;
2. Our Report may be dated some time before it is provided, or be subsequently updated to reflect changes to the Model, to Bank/Co-investor and will not have been updated for subsequent events and transactions or for any other matters which might have a material effect on its contents, nor will we have carried out any additional procedures after the date of the Report, and accordingly we do not assume any responsibility for informing Bank/Co-investor about any events which may have occurred after the date of our Report;

3. Information in our Report may be superseded by subsequent information which is available to Bank/Co-investor, in which case the subsequent information should be considered rather than that in our Report;
4. There may be matters in respect of which Bank/Co-investor should undertake its own enquiries;
5. We make no representations as to the extent to which our Report may be appropriate for Bank's/Co-investor's purposes; and
6. This Letter shall be governed by and interpreted in accordance with the laws of the State of New York and shall have exclusive jurisdiction in relation to any claim arising out of the Engagement Letter.

We confirm that the addressees are entitled to rely upon our Report, as defined in our engagement letter dated [Date]. We assume no responsibility or liability whatsoever to any addressee, arising out of or in connection with our Report except in accordance with the above basis.

We should be grateful if you would confirm your agreement to the terms of this letter by countersigning the enclosed copy of this letter and returning it to us.

Yours sincerely,

By: Managing Director Name
Managing Director
Duff & Phelps, LLC

We acknowledge receipt of this letter and agree with the terms of your engagement set out therein:

Name

Signed

Position/company

Date

Attachment: Appendix 1 – Engagement Letter

Pocahontas Parkway Acquisition:
Financial Model Review

Appendix C
Relevant Extracts from the Project Documents

Pocahontas Parkway Document Extracts

Halcrow Report

Halcrow Final Report - June 9th.pdf - Annex 1

Page 2

Loan Agreement

Definitions :

Redline Definitions(v1).DOC

Page 3

Agreement :

Redline Loan Agreement(v1).DOC

Page 9

Collateral Agency Agreement

Redline CAA(v1).DOC

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ARCA

Definitions :

ARCA Definitions (working) (10).DOC

Page 15

Agreement :

ARCA (working) (11).DOC

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Demand Note

#160021580v2_US_EAST_ - Demand Note.DOC

Page 19

Affiliate Subordinated Note

#160021727v2_US_EAST_ - Affiliate Subordinated Not.DOC

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ANNEX 1 - TRAFFIC AND REVENUE FORECASTS

UNCLASSIFIED CASE TRANSFER FORM		1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427	2428	2429	2430	2431	2432	2433	2434	2435	2436	2437	2438	2439	2440	2441	2442	2443	2444	2445	2446	2447	2448	2449	2450	2451	2452	2453	2454	2455	2456	2457	2458	2459	2460	2461	2462	2463	2464	2465	2466	2467	2468	2469	2470	2471	2472	2473	2474	2475	2476	2477	2478	2479	2480	2481	2482	2483	2484	2485	2486	2487	2488	2489	2490	2491	2492	2493	2494	2495	2496	2497	2498	2499	2500	2501	2502	2503	2504	2505	2506	2507	2508	2509	2510	2511	2512	2513	2514	2515	2516	2517	2518	2519	2520	2521	2522	2523	2524	2525	2526	2527	2528	2529	2530	2531	2532	2533	2534	2535	2536	2537	2538	2539	2540	2541	2542	2543	2544	2545	2546	2547	2548	2549	2550	2551	2552	2553	2554	2555	2556	2557	2558	2559	2560	2561	2562	2563	2564	2565	2566	2567	2568	2569	2570	2571	2572	2573	2574	2575	2576	2577	2578	2579	2580	2581	2582	2583	2584	2585	2586	2587	2588	2589	2590	2591	2592	2593	2594	2595	2596	2597	2598	2599	2600	2601	2602	2603	2604	2605	2606	2607	2608	2609	2610	2611	2612	2613	2614	2615	2616	2617	2618	2619	2620	2621	2622	2623	2624	2625	2626	2627	2628	2629	2630	2631	2632	2633	2634	2635	2636	2637	2638	2639	2640	2641	2642	2643	2644	2645	2646	2647	2648	2649	2650	2651	2652	2653	2654	2655	2656	2657	2658	2659	2660	2661	2662	2663	2664	2665	2666	2667	2668	2669	2670	2671	2672	2673	2674	2675	2676	2677	2678	2679	2680	2681	2682	2683	2684	2685	2686	2687	2688	2689	2690	2691	2692	2693	2694	2695	2696	2697	2698	2699	2700	2701	2702	2703	2704	2705	2706	2707	2708	2709	2710	2711	2712	2713	2714	2715	2716	2717	2718	2719	2720	2721	2722	2723	2724	2725	2726	2727	2728	2729	2730	2731	2732	2733	2734	2735	2736	2737	2738	2739	2740	2741	2742	2743	2744	2745	2746	2747	2748	2749	2750	2751	2752	2753	2754	2755	2756	2757	2758	2759	2760	2761	2762	2763	2764	2765	2766	2767	2768	2769	2770	2771	2772	2773	2774	2775	2776	2777	2778	2779	2780	2781	2782	2783	2784	2785	2786	2787	2788	2789	2790	2791	2792	2793	2794	2795	2796	2797	2798	2799	2800	2801	2802	2803	2804	2805	2806	2807	2808	2809	2810	2811	2812	2813	2814	2815	2816	2817	2818	2819	2820	2821	2822	2823	2824	2825	2826	2827	2828	2829	2830	2831	2832	2833	2834	2835	2836	2837	2838	2839	2840	2841	2842	2843	2844	2845	2846	2847	2848	2849	2850	2851	2852	2853	2854	2855	2856	2857	2858	2859	2860	2861	2862	2863	2864	2865	2866	2867	2868	2869	2870	2871	2872	2873	2874	2875	2876	2877	2878	2879	2880	2881	2882	2883	2884	2885	2886	2887	2888	2889	2890	2891	2892	2893	2894	2895	2896	2897	2898	2899	2900	2901	2902	2903	2904	2905	2906	2907	2908	2909	2910	2911	2912	2913	2914	2915	2916	2917	2918	2919	2920	2921	2922	2923	2924	2925	2926	2927	2928	2929	2930	2931	2932	2933	2934	2935	2936	2937	2938	2939	2940	2941	2942	2943	2944	2945	2946	2947	2948	2949	2950	2951	2952	2953	2954	2955	2956	2957	2958	2959	2960	2961	2962	2963	2964	2965	2966	2967	2968	2969	2970	2971	2972	2973	2974	2975	2976	2977	2978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"Applicable Cash Sweep Percentage" means, as of any Calculation Date:

(a) if such Calculation Date occurs during the period from the Closing Date to, but excluding the fifth (5th) anniversary of the Closing Date, 25%;

(b) if such Calculation Date occurs during the period from and including the fifth (5th) anniversary of the Closing Date to, but excluding the tenth (10th) anniversary of the Closing Date, 50%; and

(c) if such Calculation Date occurs during the period from and including the tenth (10th) anniversary of the Closing Date until the Maturity Date, 100%.

"Applicable Margin" means:

(a) with respect to Tranche A Loans (and with respect to the calculation of the commitment fee on the Available Tranche A Commitments):

(i) until and unless all outstanding Tranche B Loans have been repaid in full on the TIFIA Closing Date with the proceeds of the TIFIA Loans, the following margins during the following periods:

Period	Applicable Margin
From and including the Signing Date to, but excluding, the first (1st) anniversary of the Signing Date:	0.85%
From and including the first (1st) anniversary of the Signing Date to, but excluding, the fifth (5th) anniversary of the Signing Date:	0.85%
From and including the fifth (5th) anniversary of the Signing Date to, but excluding, the tenth (10th) anniversary of the Signing Date:	1.00%
From and including the tenth (10th) anniversary of the Signing Date to the Maturity Date:	1.30%

(ii) if all outstanding Tranche B Loans have been repaid in full on the TIFIA Closing Date with the proceeds of the TIFIA Loans, then, thereafter, the following margins during the following periods:

Period	Applicable Margin
From and including the TIFIA Closing Date, as applicable, to, but excluding, the first (1st) anniversary of the TIFIA Closing Date:	0.75%

From and including the first (1st) anniversary of the TIFIA Closing Date to, but excluding, the fifth (5th) anniversary of the TIFIA Closing Date:	0.75%
From and including the fifth (5th) anniversary of the TIFIA Closing Date to, but excluding, the tenth (10th) anniversary of the TIFIA Closing Date:	0.90%
From and including the tenth (10th) anniversary of the TIFIA Closing Date to the Maturity Date:	1.20%

(b) with respect to Tranche B Loans (and with respect to the calculation of the commitment fee on the Available Tranche B Commitments):

- (i) on the Closing Date and until the occurrence of any of the events or conditions described in any of clauses (ii) through (iv) below, 0.45%,
- (ii) after the earlier of (A) the date on which the United States Department of Transportation notifies any Borrower Party or any Affiliate of a Borrower Party in writing that T895 or the Borrower or the Project is not eligible for financing under the TIFIA or that no financing under TIFIA would otherwise be available to any Borrower Party on or before the first anniversary of the Signing Date and (B) unless the TIFIA Closing Date has occurred, the first anniversary of the Signing Date, the Applicable Margin applicable to Tranche A Loans set forth in clause (a)(i) above,
- (iii) if the TIFIA Closing Date has occurred, then after such date, the sum of (A) the Applicable Margin applicable to Tranche A Loans set forth in clause (a)(ii) above plus the number of basis points (rounded to the nearest two decimal places) that results from dividing (x) the difference between \$150,000,000 and the amount of TIFIA Loans funded on the TIFIA Closing Date by (y) 10,000,000 (but in no event more than 10 basis points), and
- (iv) if the United States Department of Transportation notifies any Borrower Party or any Affiliate of a Borrower Party in writing that T895 or the Borrower or the Project are eligible for financing under the TIFIA or the United States Department of Transportation commits to provide financing any Borrower Party, in each case in an aggregate principal amount that is less than \$150,000,000 (such lesser amount, the "Proposed TIFIA Amount", then after the date the date such notification or commitment is provided, the sum of (A) the Applicable Margin applicable to Tranche A Loans set forth in clause (a)(ii) above (except that references in clause (a)(ii) above to "TIFIA Closing Date" shall be deemed to be references to the date such notification or commitment is provided) plus the number of basis points (rounded to the nearest two decimal places) that results from dividing (x) the difference between \$150,000,000 and the Proposed TIFIA Amount by (y) 10,000,000 (but in no even more than 10 basis points), provided

that if after the date of such notification or commitment the United States Department of Transportation further reduces the Proposed TIFIA Amount pursuant to another notification or commitment as contemplated above, then the calculation set forth above shall be repeated using such new reduced Proposed TIFIA Amount and after the date of such further notice or commitment, the margin shall be as so recalculated (up to 10 basis points).

Page 5

"Available Tranche A Commitment" means, as to any Tranche A Lender, at any time, an amount equal to the excess, if any, of (a) the amount of such Lender's aggregate Tranche A Commitment, minus (b) the aggregate principal amount of all Tranche A Loans made by such Lender prior to such time.

"Available Tranche B Commitment" means, as to any Tranche B Lender, at any time, an amount equal to the excess, if any, of (a) the amount of such Lender's aggregate Tranche B Commitment, minus (b) the aggregate principal amount of all Tranche B Loans made by such Lender prior to such time.

Page 6

"Calculation Date" means each June 30 and December 31 occurring after the Closing Date.

Page 7

"Cash Flow Available for Sweep" means, as of any Calculation Date, amounts remaining on deposit in the Proceeds Account following payment of the amounts, or establishment of reserves for payment of the amounts, described in clauses First through Ninth of Section 5.02(b) of the Collateral Agency Agreement.

Page 9

"Debt Service Coverage Ratio" means, on each Calculation Date, the ratio of (a) Net Cash Flow for the twelve-month period ending (or, in the case of a Projected Debt Service Coverage Ratio calculation, commencing) on such Calculation Date (or any shorter period commencing on the Closing Date and ending on such Calculation Date), plus the amount of principal outstanding on the first date of the applicable Calculation Period under the Demand Note, plus the amounts on deposit in the Restricted Sub-account of the Total Debt Service Reserve Account as of the first date of the applicable Calculation Period, to (b) Mandatory Debt Service for such period.

Page 11

"Extraordinary Maintenance and Repair Reserve Account" means the "Extraordinary Maintenance Reserve Account" established in accordance with the requirements of the ARCA and the Loan Agreement in the name of the Collateral Agent pursuant to Section 5.01 of the Collateral Agency Agreement.

"Extraordinary Maintenance and Repair Letter of Credit" means an Acceptable Letter of Credit that satisfies the requirements Sections 8.07(d) and 8.07(e) of the ARCA.

"Extraordinary Maintenance and Repair Reserve Required Balance" means (a) on the Closing Date and each Calculation Date occurring before the first calendar half-year following the second anniversary of the Closing Date (as defined in the ARCA), the amount set forth in the Base Case Model as being required to be on deposit on such date in the Extraordinary Maintenance and Repair Reserve Account and (b) thereafter, the "Extraordinary Maintenance and Repair Reserve Required Balance" as defined in the ARCA.

"Extraordinary Maintenance and Repair Work" has the meaning given to that term in the ARCA.

Page 15

"Interest Period" means, for each Loan, (a) initially the period commencing on the date of the Borrowing of such Loan and ending on the numerically corresponding day in the calendar month that is one, three or six months (or such other period of less than six months acceptable to the Required Lenders if such period ends on a date which coincides with an Interest Payment Date on June 30 or December 31) and (b) thereafter, each period commencing on the last day of the preceding Interest Period and ending the numerically corresponding day in the calendar month that is one, two, three or six months thereafter, in each case as selected by the Borrower or otherwise determined in accordance with Section 2.4 of the Loan Agreement; provided that:

(a) any Interest Period that would otherwise end on a day that is not a Business Day shall be extended to the next succeeding Business Day unless such Business Day falls in another calendar month, in which case such Interest Period shall end on the next preceding Business Day; and

(b) any Interest Period which begins on the last Business Day of a calendar month (or on a day for which there is no numerically corresponding day in the calendar month at the end of such Interest Period) shall end on the last Business Day of the calendar month at the end of such Interest Period.

Page 16

"Loan Life Cover Ratio" means, as of each Calculation Date, the ratio of (a) the sum (without duplication) of: (i) the present value of the future Net Cash Flow forecast from such Calculation Date looking forward to the scheduled Maturity Date, using an updated Base Case Model, adjusted to take into account actual results and updated Project Revenue and traffic projections (which projections shall be determined in accordance with the Projected Revenue Determination Procedure), and discounted at Senior Weighted Average Cost of Debt plus (ii) any balances credited to the Project Accounts (other than the Extraordinary Maintenance and Repair Reserve Account and the Construction Proceeds Account) as of such Calculation Date plus (iii) the outstanding principal amount of the Demand Note as of such Calculation Date to (b) the aggregate amount of the Loans outstanding on such Calculation Date.

Page 17

"Mandatory Debt Service" means, for any Calculation Period, the sum of (a) all interest on the Loans payable by the Borrower during such Calculation Period, (b) all fees payable by the Borrower to the Lenders and the Administrative Agent and the Collateral Agent during such Calculation Period, (c) any payments constituting net Hedging Obligations payable by the Borrower (or less net amounts payable to the Borrower) during such Calculation Period and (d) all interest and other mandatory payments during such period in respect of any other Indebtedness of any Borrower Party referred to in any of Sections 7.3(g) and 7.3(i) of the Loan Agreement (other than any such Indebtedness that is subordinated to the Obligations and payable from the Distribution Account).

"Maturity Date" means the date that is thirty (30) years after the Signing Date; provided that if such date is a day other than a Business Day, the Maturity Date shall be the next succeeding Business Day unless such next succeeding Business Day falls in the next calendar month, in which case the Maturity Date shall be the next preceding Business Day.

Page 18

"Net Cash Flow" means, in respect of any period, (a) aggregate Project Revenues received during such period, less (b) the Operating Expenses and Major Maintenance costs paid during such period (other than Major Maintenance costs funded by funds withdrawn from the Extraordinary Maintenance and Repair Reserve Account or from the Construction Proceeds Account or by insurance proceeds (other than business interruption and loss of advance profits)) less (c) deposits to the Extraordinary Maintenance and Repair Reserve Account made during such period, plus (d) amounts withdrawn from the Extraordinary Maintenance and Repair Reserve Account during such period, except to the extent used to pay for Extraordinary Maintenance and Repair Work, less (e) without duplication, federal or state income taxes

payable by a Person in respect of income or gross revenues of a Borrower Party as a result of such Person and Borrower Party being a member of the same consolidated taxpayer group.

Page 19

"Operating Expenses" means any and all of the following expenses paid or payable by the Borrower Parties all operation and maintenance costs incurred in relation to the Parkway, consumables, payments under any operating lease, payments pursuant to the O&M Agreement, taxes, insurance premiums and costs, police services, payments of the permit fee under Section 5.01(a) of the ARCA and payments under the ARCA for services of the VDOT, but exclusive of Major Maintenance costs and payments on Indebtedness (whether or not constituting Mandatory Debt Service). Operating Expenses do not include non-cash charges, such as depreciation, amortization or other bookkeeping entries of a similar nature.

Page 22

"Proceeds" means "proceeds" as such term is defined in the UCC or under other relevant law and, in any event, shall include, but shall not be limited to, (i) any and all proceeds of, or amounts (in whatsoever form, whether cash, securities, property or other assets) received under or with respect to, any insurance, indemnity, warranty or guaranty payable to any Borrower Party from time to time, and claims for insurance, indemnity, warranty or guaranty effected or held for the benefit of any Borrower Party, in each case with respect to any of the Collateral, (ii) any and all payments (in any form whatsoever, whether cash, securities, property or other assets) made or due and payable to any Borrower Party from time to time in connection with any requisition, confiscation, condemnation, seizure or forfeiture of all or any part of the Collateral by any Governmental Authority (or any person acting under color of Governmental Authority), and (iii) any and all other amounts (in any form whatsoever, whether cash, securities, property or other assets) from time to time paid or payable under or in connection with any of the Collateral (whether or not in connection with the sale, lease or other disposition of the Collateral).

"Proceeds Account" means the "Proceeds Account" established and created in the name of the Collateral Agent pursuant to Section 5.01 of the Collateral Agency Agreement.

"Project Accounts" means, collectively, (1) the Proceeds Account, (2) the Loss Proceeds Account, (3) the Total Debt Service Reserve Account, (4) the Extraordinary Maintenance and Repair Reserve Account, (5) the Distribution Account, (6) the Construction Proceeds Account, (7) the Operating Account and (8) the Collections Account.

"Project Revenues" means, for any period (without duplication), all revenue received by or on behalf of any Borrower Party during such period, including but not limited to Toll Revenues, interest paid in respect of any Project Accounts, proceeds from any business interruption insurance, and any other receipts otherwise arising or derived from or paid or payable in respect of the Project, but excluding proceeds of borrowings (including any Borrowing of any of the Loans or of the Affiliate Subordinated Loans), equity contributions to the Borrower, payments under the Demand Note, proceeds of condemnation proceedings and asset sales to the extent that such proceeds are not reinvested in replacement property, and insurance payments other than proceeds from business interruption insurance.

"Projected Debt Service Coverage Ratio" means, as of any Calculation Date, the Debt Service Coverage Ratio for the twelve-month period commencing on such date reasonably projected by the Borrower consistent with the actual results then in effect.

Page 24

"Senior Weighted Average Cost of Debt" means, for each semi-annual period from each Calculation Date to Maturity Date, the ratio of (a) the sum of each of the Loans outstanding as of the end of such semi-annual period multiplied by the forecast interest rate for such period and for such Loan (determined on the basis of the fixed rate of interest paid by the Borrower under the Hedging Obligations and as to the remainder the variable rate of interest consistent with the Base Case Model or the most recently updated Base Case Model, as applicable), to (b) the aggregate then-outstanding principal amount of the Loans as of the end of such semi-annual period. For all future semi-annual periods in which the outstanding principal

amount of the Loans is projected to be zero, the Senior Weighted Average Cost of Debt for that semi-annual period shall be the Senior Weighted Average Cost of Debt at the time of (but before giving effect to) the projected final repayment of the Loans.

Page 27

"Tranche A Commitment" means, with respect to each Tranche A Lender, the commitment of such Tranche A Lender to make Tranche A Loans to the Borrower pursuant to Section 2.1(a) of the Loan Agreement, in an aggregate principal amount at any one time outstanding not to exceed the amount set forth opposite such Tranche A Lender's name on Schedule 2.1 attached to the Loan Agreement under the heading "Tranche A Commitment" or in the Assignment and Assumption pursuant to which such Tranche A Lender becomes a party hereto, as applicable, as such amount may be adjusted from time to time in accordance with the Loan Agreement.

"Tranche A Commitment Period" means the period from and including the Closing Date to the earliest to occur of (a) the date twelve months from the Closing Date, (b) the date on which the Available Tranche A Commitments are reduced to zero, and (c) the date of termination of the aggregate Tranche A Commitments.

"Tranche A Lender" means each Lender that has a Tranche A Commitment or that holds a Tranche A Loan.

"Tranche A Loans" means the Loans made pursuant to Section 2.1(a) of the Loan Agreement.

"Tranche B Commitment" means, with respect to each Tranche B Lender, the commitment of such Tranche B Lender to make Tranche B Loans to the Borrower pursuant to Section 2.1(b) of the Loan Agreement, in an aggregate principal amount at any one time outstanding not to exceed the amount set forth opposite such Tranche B Lender's name on Schedule 2.1 attached to the Loan Agreement under the heading "Tranche B Commitment" or in the Assignment and Assumption pursuant to which such Tranche B Lender becomes a party hereto, as applicable, as such amount may be adjusted from time to time in accordance with the Loan Agreement.

"Tranche B Commitment Period" means the period from and including the Closing Date to the earliest to occur of (a) the date forty two (42) months from the Closing Date, (b) the date on which the Available Tranche B Commitments are reduced to zero, and (c) the date of termination of the aggregate Tranche B Commitments.

Interest.

(a) Each Loan shall bear interest during each Interest Period at a rate per annum equal to LIBOR for such Interest Period plus the Applicable Margin.

(b) Notwithstanding the foregoing, if any principal of or interest on any Loan or any fee or other amount payable by the Borrower hereunder is not paid when due, whether at stated maturity, upon acceleration or otherwise, such overdue amount shall bear interest, after as well as before judgment, from the expiration of the applicable grace period to the date until paid in full at a rate per annum equal to (i) in the case of overdue principal of any Loan, 2% plus the rate otherwise applicable to such Loan as provided in the preceding paragraph of this Section 2.3 or (ii) in the case of any other amount, 2% plus the Base Rate. In addition, if the Borrower fails to pay any principal of or interest upon the Loans on the date when due, such amount shall bear interest from the due date until the earlier to occur of payment in full or the expiration of the applicable grace period at the rate applicable to Loans during such period as provided in the preceding paragraph of this Section.

(c) Accrued interest on each Loan shall be payable in arrears on each Interest Payment Date; provided that (i) interest accrued pursuant to paragraph (b) of this Section 2.3 shall be payable on demand and (ii) upon any repayment or prepayment of any Loan in whole or in part, accrued interest on the principal amount repaid or prepaid shall be payable on the date of such repayment or prepayment.

(d) All interest hereunder shall be computed on the basis of a year of 360 days and the actual number of days elapsed, except that interest computed by reference to the Base Rate at times when the Base Rate is based on the Prime Rate shall be computed on the basis of a year of 365 days (or 366 days in a leap year), and in each case shall be payable for the actual number of days elapsed (including the first day but excluding the last day). The applicable Base Rate or LIBOR shall be determined by the Administrative Agent in accordance with the terms of this Agreement, and such determination shall be conclusive absent manifest error.

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Repayment of Loans.

(e) On each Calculation Date, the Applicable Cash Sweep Percentage of Cash Flow Available for Sweep as of such Calculation Date shall be applied to repay, on a pro rata basis, the Loans then outstanding together with accrued and unpaid interest on the amount repaid and any additional amounts required pursuant to Section 3.4. If such Calculation Date occurs on or after the TIFIA Mandatory Repayment Commencement Date, such prepayments shall be applied to the remaining installments of principal of the Loans in the inverse order of the maturity as contemplated by Section 2.5(b).

(f) On each Calculation Date occurring on or after the TIFIA Mandatory Repayment Commencement Date, the Borrower shall repay a portion of the Loans equal in amount to (i) the Loans outstanding immediately prior to the TIFIA Mandatory Repayment Commencement Date divided by (ii) the number of Calculation Dates from the TIFIA Mandatory Repayment Commencement Date (including any Calculation Date occurring on such date) to and including the Maturity Date.

(g) The Borrower shall repay to the Administrative Agent for the account of the Lenders on the Maturity Date the aggregate principal amount of the Loans then outstanding, together with all accrued and unpaid interest thereon, and all other amounts owing or payable hereunder or under any other Loan Document.

(h) Principal amounts prepaid or repaid may not be reborrowed.

Use of Proceeds.

(i) Tranche A Loans. The Borrower may use the proceeds of the Tranche A Loans solely for the purpose of making the amount of such proceeds available to T-Holdings and T-Finance, by means of a capital contribution or an intercompany loan, and shall cause each of T-Holdings and T-Finance to use the proceeds of such capital contribution or such intercompany loan for the sole purpose of making the amount thereof available to T895. T895 may use such proceeds solely for the purpose of (i) defeasance and/or discharge of the Senior Bonds and the First Tier Subordinate Bonds and discharge of the Second Tier Subordinate Bonds in full, (ii) funding of the Total Debt Service Reserve Account, (iii) funding of the Extraordinary Maintenance and Repair Reserve Account, (iv) payment of the fees payable on the date of the initial Borrowing to the Mandated Lead Arrangers and the Administrative Agent, (v) reimbursing the Borrower for costs and expenses payable by the Borrower pursuant hereto in connection with the closing of the Loans, and (vi) payment of the other reasonable fees, costs and expenses related to the closing of the transactions contemplated herein (including development costs incurred by the Member during the bid preparation phase and assumed by the Borrower), in each case to the extent set forth in the Base Case Model.

(j) Tranche B Loans. The Borrower may use the proceeds of the Tranche B Loans solely for the purpose of making the amount of such proceeds available to T-Holdings and T-Finance, by means of a capital contribution or an intercompany loan, and shall cause each of T-Holdings and T-Finance to use the proceeds of such capital contribution or intercompany loan for the sole purpose of making the amount thereof available to T895. T895 may use such proceeds solely for (i) in the case of the Tranche B Loans advanced on the Closing Date, the purposes permitted under Section 2.6(a), (ii) in the case of Tranche B Loans advanced after the Closing Date, (A) the costs associated with the upgrade, improvement or repair of the electronic toll collection system for the Parkway, and (B) post-closing extraordinary costs in a maximum aggregate amount not exceeding \$8,350,000 and (iii) any other costs approved by the Administrative Agent (acting at the direction of the Required Lenders).

Fees.

(k) Commitment Fees. The Borrower agrees to pay to the Administrative Agent, for the account of each Lender a commitment fee on the daily amount of the Available Tranche A Commitment and Available Tranche B Commitment of such Lender during the period from and including the Signing Date to but excluding the last day of the Tranche A Commitment Period or the Tranche B Commitment Period, as the case may be, at a rate per annum of 0.35%. Accrued commitment fees shall be payable in arrears on each Interest Payment Date, commencing on the first of such dates to occur after the date hereof, and on the last day of the respective Commitment Period. All commitment fees shall be calculated on the basis of a year of 360 days and for the actual days elapsed (including the first day but excluding the last day). Upon any change in the Applicable Margin, the rate of the commitment fee shall change on the same day.

(l) Other Fees. The Borrower agrees to pay to the Mandated Lead Arrangers and the Administrative Agent for their own respective accounts fees payable in the amounts and at the times separately agreed upon between the Borrower and such parties, which fees shall be deemed to be payable hereunder. Such fees shall be fully earned when paid and shall not be refundable under any circumstances.

Page 2 - Conditions Precedent

(m) Base Case Model. The Administrative Agent shall have received the Base Case Model (in printed and in electronic format), certified as such by an Authorized Officer of the Borrower, showing (i) a minimum projected Debt Service Coverage Ratio equal to or greater than 1.24 to 1.00 for the period from the Closing Date to the scheduled Maturity Date and (ii) a minimum Loan Life Cover Ratio equal to or greater than 1.30 to 1.00 for the period from the Closing Date to the scheduled Maturity Date, and the Model Auditor shall have approved such Base Case Model and the assumptions used therein and shall have confirmed the integrity and mechanics of the Base Case Model and the accuracy and compliance of the financial assumptions (including tax, legal and accounting principles and formulae) with the ARCA

and the other Project Contracts and the Loan Documents; and the Base Case Model (and related sensitivities) shall be acceptable to the Mandated Lead Arrangers.

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Section 1.2 Operation and Maintenance; Funding of Major Maintenance Reserve.

(a) ~~~~~

(b) ~~~~~

(c) The Borrower shall cause the Extraordinary Maintenance and Repair Reserve Account to be fully funded in such amounts as required under the ARCA and the Collateral Agency Agreement.

(a) Proceeds Account.

Except for amounts to be deposited in other Project Accounts pursuant to this Article 5, all Project Revenues shall be deposited into the Proceeds Account, other than any Toll Revenues received in cash deposited into the Collections Account. All Toll Revenues on deposit at the Collections Account shall be transferred from the Collection Account to the Proceeds Account as provided in Section 5.09. Each Borrower Party will on or before the Closing Date have irrevocably instructed all parties paying Project Revenues to such Borrower Party under any contracts or agreements related to the Project (including all Material Project Contracts) in effect as of the date hereof to deposit such Project Revenues into the Proceeds Account, and shall so irrevocably instruct all other parties at any time paying Project Revenues to the Borrower under such contracts or agreements to make such payments under the Proceeds Account; provided, however, that no such instructions shall be required to be given to users of the Project in respect of the payment of Toll Revenues in cash. Each Borrower Party shall promptly deposit or cause to be deposited into the Proceeds Account or, in the case of Toll Revenues from users of the Project received in cash, the Collections Account, as applicable, all Project Revenues and all other amounts received by such Borrower Party from any source whatsoever the application of which is not otherwise specified hereunder. Pending such deposit, each Borrower Party shall hold all such amounts coming into its possession in trust for the benefit of the Secured Parties.

Subject to Section 5.12 hereof, the Collateral Agent shall make the following withdrawals, transfers and payments from the Proceeds Account in the amounts, at the times and for the purposes specified below and in the following order of priority (it being agreed that no amount shall be withdrawn on any date pursuant to any clause below until amounts sufficient as of that date for all the purposes specified under the prior clauses shall have been withdrawn or set aside):

First, on each Monthly Funding Date, to the Operating Account, an amount equal to the Operating Expenses then due and payable or projected to become due and payable prior to the next succeeding Monthly Funding Date;

Second, on each Monthly Funding Date, after the application for such purposes of (x) funds on deposit in the Construction Proceeds Account and (y) funds from the Extraordinary Maintenance and Repair Reserve Account, to the Operating Account, an amount equal to the Capital Expenditures required to comply with T895's obligations under the ARCA or to comply with applicable Laws related to safety then due and payable or projected to become due and payable prior to the next succeeding Monthly Funding Date;

Third, on each Monthly Funding Date (or any other date when due) to the Administrative Agent, an amount equal to all fees then due and payable to the Administrative Agent, the Collateral Agent, the Securities Intermediary and the Mandated Lead Arrangers, in their respective capacities as such, under any of the Loan Documents;

Fourth, on each Interest Payment Date and on each other date on which the following amounts shall be payable, to the Administrative Agent, an amount equal to (i) all interest on the Loans and all fees (other than those referred to in clause "Third" above), and other amounts then due and payable to the Lenders under the Loan Agreement or the Notes issued thereunder (other than principal) and (ii) all Hedging Obligations then due and payable under the Hedging Agreements to the Hedging Banks;

Fifth, on each date on which the following amounts shall be payable, to the Administrative Agent, an amount equal to all other amounts not referred to in clauses "Third" or "Fourth" above or clauses "Ninth" or "Tenth" below, payable under the Loan Documents by any Borrower Party;

Sixth, on each Calculation Date to the Extraordinary Maintenance and Repair Reserve Account an amount which, together with all funds on deposit therein or credited thereto, is equal to the then current Extraordinary Maintenance and Repair Reserve Required Balance;

Seventh, subject to any contrary or supplemental provisions of the intercreditor agreement contemplated by Section 7.3(e) of the Loan Agreement (of which the Collateral Agent has been notified in writing by the Administrative Agent), on each date occurring after the TIFIA Closing Date on which a payment of accrued interest on the TIFIA Loan is due, to TIFIA, an amount equal to such accrued interest (other than any accrued interest which is permitted to be deferred or capitalized into principal under the terms of the TIFIA Loan Agreement);

Eighth, on each Calculation Date occurring on or after TIFIA Mandatory Repayment Commencement Date, to the Administrative Agent, an amount equal to the ratio of (i) the Loans outstanding immediately prior to the TIFIA Mandatory Repayment Commencement Date divided by (ii) the number of Calculation Dates from the TIFIA Mandatory Repayment Commencement Date (including any Calculation Date occurring on such date) to and including the Maturity Date;

Ninth, on each Calculation Date occurring on or after the TIFIA Mandatory Debt Service Commencement Date, an amount equal to the scheduled principal of the TIFIA Loans then due and payable under the TIFIA Loan Agreement;

Tenth, on each Calculation Date, to the Administrative Agent an amount equal to the Applicable Cash Sweep Percentage of the Cash Flow Available for Sweep for such Calculation Date, and any additional amounts required pursuant to Section 3.4 of the Loan Agreement in respect thereof;

Eleventh, on each Calculation Date (or such later date after giving effect to the transfers required to be made pursuant to clauses First through Tenth for such Calculation Date), all remaining amounts in the Proceeds Account, if any, shall be transferred to the Distribution Account.

If the Borrower at any time receives a payment of Operator Damages in respect of future Net Revenue Impact, the Borrower may (at its option at any time within five (5) Business Days after receipt of such payment) provide written instructions to the Administrative Agent that such amount shall be deposited into a separate sub-account of the Proceeds Account; provided, that prior to such deposit, the Borrower shall provide to the Administrative Agent a calculation showing the future years for which such amount was paid as compensation in respect of Net Revenue Impact (which calculation shall be, to the extent available, accompanied by any report of a traffic consultant or a copy of an agreement of the Borrower and the VDOT that may have been prepared in connection therewith). In the event that such amount is deposited into such sub-account, as of the commencement of each year for which such compensation was paid, the Borrower shall provide a written request to the Administrative Agent, who shall in turn provide written direction to the Collateral Agent that the portion thereof constituting Operator Damages in respect of Net Revenue Impact for such year, together with interest or other earnings accrued thereon from the date of deposit, shall be transferred from such sub-account to the Proceeds Account and applied in accordance with the provisions of this paragraph (b) above. If the Borrower does not timely make the foregoing election, it shall apply such payment to prepayment of the Loans in accordance with Section 2.8(c)(ii) of the Loan Agreement.

The proceeds of any payment under the Demand Note received by the Securities Intermediary shall, as directed by the Administrative Agent, be applied in accordance with clauses First, Second, Third, Fourth, Fifth, Sixth or Seventh of this Section 5.02(b), in the foregoing order of priority, and may not be applied for any other purpose. If the obligor under the Demand Note fails for any reason to make a payment in full when demanded thereunder (or, if the obligations of such obligor thereunder are guaranteed by any Person, such guarantor fails for any reason to make a payment in full when due under such guarantee), then the Administrative Agent shall direct that the amounts on deposit in the Total Debt Service Reserve Account shall be applied in accordance with clauses First, Second, Third, Fourth, Fifth, Sixth or Seventh of this Section 5.02(b), first applying amounts deposited to the Unrestricted Sub-account of Total Debt Service Reserve Account so long as such amounts are sufficient and thereafter applying amounts deposited to the Restricted Sub-account of Total Debt Service Reserve Account. Notwithstanding anything to the contrary herein, the parties hereby agree that (i) on the Signing Date the Borrower shall cause an amount equal to not less than \$_____ to be deposited into the Proceeds Account and (ii) on the Closing Date the amounts so deposited in the Proceeds Account may be applied by the Borrower for the purposes permitted under Section 2.06 of the Loan Agreement and for the purpose of making the Demand Note Loan in the principal amount of \$55,000,000.

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(b) Distribution Account.

The Distribution Account shall be funded in accordance with and subject to Section 5.02(b).

In the event that amounts on deposit in the Proceeds Account are insufficient at any time to pay in full the amounts described in clauses First through Seventh in Section 5.02(b) of this Agreement, the Collateral Agent shall, as directed by the Administrative Agent, use the funds in the Distribution Account to pay, after applying amounts on deposit in the Proceeds Account, such remaining amounts.

Pursuant to written direction from the Administrative Agent, funds on deposit in the Distribution Account may be paid to the Borrower (or the order of the Borrower, including for payment of the Borrower Parties' indebtedness that is subordinated to the Obligations) at its written request on any Calculation Date, and on any day thereafter prior to the immediately succeeding Calculation Date, on which all of the following conditions are satisfied on such Calculation Date or with effect from such Calculation Date and, with respect to clauses (ii) and (iv) below, remain satisfied on the date of such distribution:

(a) all transfers and distributions required to be made pursuant to Clauses First through Ninth of Section 5.02(b) on or prior to such Calculation Date shall have been satisfied in full;

(b) no Default or Event of Default under the Loan Agreement has occurred and is continuing or would result from the making of the proposed transfers from the Distribution Account under the Loan Agreement;

(c) Each of the Debt Service Coverage Ratio and the Projected Debt Service Coverage Ratio as of such Calculation Date (excluding for the purposes of the calculations thereof (x) any amount of principal outstanding under the Demand Note and (y) the amounts then on deposit in the Restricted Sub-account of the Total Debt Service Reserve Account) is 1.10 to 1.0 or greater;

(d) the Total Debt Service Reserve Account and the Extraordinary Maintenance and Repair Reserve Account are funded as required under the Loan Documents; and

(e) the Loan Life Cover Ratio as of such Calculation Date is 1.20 to 1.0 or greater.

and the Borrower certifies in writing to the Administrative agent and the Collateral Agent by delivery of a Funds Transfer Certificate that the conditions under this Section 5.07(c) have been met.

Base Case Initial Targeted Rate of Return means a pre-tax internal rate of return (rounded up, if necessary, to a whole multiple of 1/1000 of 1%) on Total Invested Project Funds of 6.5%, calculated based on the Real Net Cash Flow of the Project for each Semi-Annual Period.

Base Case Secondary Targeted Rate of Return means a pre-tax internal rate of return (rounded up, if necessary, to a whole multiple of 1/1000 of 1%) on Total Invested Project Funds of 8.0%, calculated based on the Real Net Cash Flow of the Project for each Semi-Annual Period.

Extraordinary Maintenance and Repair Work means maintenance, repair, renewal, reconstruction or replacement of any portion or component of the Project of a type which is not normally included as an annually recurring cost in the Operator's roadway maintenance and repair budgets.

Extraordinary Maintenance and Repair Reserve is defined in Section 8.07(a).

Extraordinary Maintenance and Repair Required Balance means, at any time, with respect to the Extraordinary Maintenance and Repair Work set forth in the most recent Five Year Assessment, without duplication, the greater of:

- (a) 110% of the projected costs of Extraordinary Maintenance and Repair Work scheduled to be performed in or by the end of the first year of such Five Year Assessment; or
- (b) the summation of the following amounts:
 - (i) 100% of the projected costs of Extraordinary Maintenance and Repair Work scheduled to be performed in or by the end of the first year of such Five Year Assessment; plus
 - (ii) 66.67% of the projected costs of Extraordinary Maintenance and Repair Work scheduled to be performed in or by the end of the second year of such Five Year Assessment period; plus
 - (iii) 33.33% of the projected costs of Extraordinary Maintenance and Repair Work scheduled to be performed in or by the end of the third year of such Five Year Assessment period.

Net Cash Flow means, in respect of each Semiannual Period after the Closing Date, (a) aggregate Toll Revenues, investment earnings and other Revenues in substitution or replacement of Toll Revenues (including any compensation the Department pays for Net Revenue Impact) received by the Operator during such Semiannual Period, including all amounts derived from the sale or other disposition of the Operator's Interest (excluding, however, the proceeds of any direct or indirect sale of equity interests in the Operator), less (b) the Operating Costs paid during such Semiannual Period, less (c) contributions during such Semiannual Period to the Extraordinary Maintenance and Repair Reserve or any other reserve for operation and maintenance costs required under any Financing Assignment for senior Operator Debt.

Operating Costs means all reasonable costs incurred and paid for by the Operator in relation to the Project, including without limitation costs for operation and maintenance, consumables, payments under any lease (other than a financing lease constituting Operator Debt), payments pursuant to the

agreements for the management, operation and maintenance of the Project, taxes (exclusive of taxes measured by net income), insurance, payments for Oversight Services, police services; costs for any Extraordinary Maintenance and Repair Letter of Credit, O&M Letter of Credit or other security, capital expenditures, payments to the Department in accordance with Section 5.01 and any other reasonable expense paid for the development, completion, enhancement, expansion, major maintenance, repair, reconstruction, rehabilitation, renewal, and replacement of the Project, but exclusive of (a) costs paid from funds deposited to the Extraordinary Maintenance and Repair Reserve or any reserve for operation and maintenance costs, (b) costs paid from Total Invested Project Funds, (c) payments of Operator Debt (including interest thereon), (d) any Distributions, (e) third-party entertainment costs, lobbying and political activity costs, costs of alcoholic beverages, costs for first class travel in excess of prevailing economy travel costs, and costs of club memberships, in each case to the extent that such costs would not be reimbursed to an employee of the Department in the regular course of business and any other costs which are not allowable pursuant to the list attached as Exhibit M. Operating Costs do not include non-cash charges, such as depreciation, amortization or other bookkeeping entries of a similar nature.

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Real IRR means an internal rate of return adjusted to remove the effects of inflation from the calculation of the internal rate of return (such adjustment to be calculated by reference to changes in the CPI from the Closing Date to the calculation of the internal rate of return).

Real Net Cash Flow means, for any Semiannual Period, Net Cash Flow but reduced to remove the effects of inflation from the calculation of Net Cash Flow (such reduction to be calculated by reference to changes in the CPI from the Closing Date to the close of the applicable Semiannual Period).

Total Invested Project Funds means (a) all amounts paid by the Operator to the Association pursuant to the Asset Purchase Agreement or deposited by the Operator or its Affiliates into any reserves as of the Closing Date as required by this Agreement or the Initial Project Financing Agreements (minus any amounts of cash or securities acquired by the Operator from the Association under the Asset Purchase Agreement, except to the extent deposited by the Operator or its Affiliates into the reserves as of the Closing Date); (b) all documented fees, costs and expenses incurred by the Operator or its Affiliates on or after April 28, 2005 and paid by the Operator or its Affiliates in connection with the investigation, evaluation, negotiation, and closing of the purchase under the Asset Purchase Agreement and this Agreement; and (c) all capital contributions or debt advances made by the members of the Operator or its Affiliates after the Closing Date and Operator Debt incurred by the Operator after the Closing Date (other than (i) capital contributions, debt advances or Operator Debt incurred or used directly or indirectly to fund Distributions or (ii) any Refinancing to the extent that it does not increase the principal amount of Operator Debt then outstanding).

PERMIT FEE

Permit Fee

- (a) If, as of the close of any Semiannual Period,
- (i) the Project shall have achieved the Initial Targeted Return but not the Secondary Targeted Return as of such date, the Operator shall pay to the Department, as a permit fee (payable *parri passu* with other Operating Costs), 40% of the aggregate Toll Revenues, investment earnings and other Revenues in substitution or replacement of Toll Revenues (including any compensation the Department pays for Net Revenue Impact) received by or on behalf of the Operator during such Semiannual Period (and during each subsequent Semiannual Period so long as, as of the close such Semiannual Period, the Project shall have achieved the Initial Targeted Return but not the Secondary Targeted Return), or
 - (ii) the Project shall have achieved the Secondary Targeted Return as of such date, the Operator shall pay to the Department, as a permit fee (payable *parri passu* with other Operating Costs), 80% of the aggregate Toll Revenues, investment earnings and other Revenues in substitution or replacement of Toll Revenues (including any compensation the Department pays for Net Revenue Impact) received by or on behalf of the Operator during such Semiannual Period (and during each subsequent Semiannual Period so long as, as of the close such Semiannual Period, the Project shall have achieved the Secondary Targeted Return),

which funds the Operator shall pay to the Department within 30 days after the close of each Semiannual Period for which amounts are payable.

- (b) For purposes of subsection (a) above:
- (i) the Initial Targeted Return shall be treated as having been achieved as of the close of a Semiannual Period if the Real Net Cash Flow of the Project for that Semiannual Period and for all prior Semiannual Periods combined shall yield a pre-tax internal rate of return on Total Invested Project Funds equal to the Base Case Initial Targeted Rate of Return; and
 - (ii) the Secondary Targeted Return shall be treated as having been achieved as of the close of a Semiannual Period if the Real Net Cash Flow of the Project for that Semiannual Period and for all prior Semiannual Periods combined shall yield a pre-tax internal rate of return on Total Invested Project Funds equal to the Base Case Secondary Targeted Rate of Return.

(c) At the request of either party from time to time (but not more than once per year), the Operator and the Department will discuss in good faith possible adjustments to the Operating Costs, using the federal Contract Cost Principles and Procedures, 48 C.F.R. 31.205, as non-binding guidance to ensure that only reasonable and customary costs are included as Operating Costs.

Extraordinary Maintenance and Repair Reserve.

(a) The Operator shall regularly fund a reserve (the "**Extraordinary Maintenance and Repair Reserve**") that shall be available exclusively for funding Extraordinary Maintenance and Repair Work in accordance with **Section 8.08** (provided that if the Operator establishes to the reasonable satisfaction of the Department that the costs of Extraordinary Maintenance and Repair Work for which funds on deposit in the Extraordinary Maintenance and Repair Reserve have been paid by the Operator or that such funds are in excess of the sum of (i) the amount actually expended plus (ii) 110% of the reasonably estimated remaining amount required for the Extraordinary Maintenance and Repair Work, then the Operator may withdraw such surplus funds from the Extraordinary Maintenance and Repair Reserve so long as such funds are applied in accordance with **Sections 4.01(d) and (e)**). Subject to **Section 8.07(b)**, the Extraordinary Maintenance and Repair Reserve shall be held in an account with the Collateral Agent or such other financial institution as may be nominated by the Operator and approved by the Department.

~~~~~. Such institution may invest and reinvest any amounts deposited in the Extraordinary Maintenance and Repair Reserve from time to time in Eligible Investments at the direction of the Operator, and earnings thereon shall be paid to Operator provided that the Extraordinary Maintenance and Repair Reserve is fully funded in accordance with this **Section 8.07**.

~~~~~The Operator will have the right to payments from the Extraordinary Maintenance and Repair Reserve for the costs of Extraordinary Maintenance and Repair Work performed in accordance with **Section 8.08**. Except as provided otherwise in **Section 6.02(b)(viii)**, in no event shall any Lender or the Collateral Agent have any right to use or apply funds in the Extraordinary Maintenance and Repair Reserve for any purpose other than Extraordinary Maintenance and Repair Work.

(b) Subject to **subsection (c) below**, commencing with the first calendar half-year following the second anniversary of the Closing Date and continuing thereafter throughout the Term, the Operator shall cause amounts to be deposited to the Extraordinary Maintenance and Repair Reserve from time to time as shall be necessary to maintain the Extraordinary Maintenance and Repair Required Balance at all times. If at any time during the course of Extraordinary Maintenance and Repair Work on a Task the actual incurred costs thereof are such that the balance in the Extraordinary Maintenance and Repair Work Reserve for such Task is less than the total amount required to be funded to the Extraordinary Maintenance and Repair Work Reserve for such Task, the Operator shall promptly increase its deposits in order to fully make up the difference. If after completion of and payment in full for Extraordinary Maintenance and Repair Work on a Task the actual incurred costs thereof are such that the balance in the Extraordinary Maintenance and Repair Work Reserve for such Task is more than the total amount funded to the Extraordinary Maintenance and Repair Work Reserve for such Task, the surplus shall be distributed to the Operator.

(c) It is the parties' intent that (i) the provisions of this **Section 8.07** establish the minimum requirements of Project Financing Agreements regarding reserves, security and funding for performance of major maintenance, repair, reconstruction, rehabilitation, renewal and replacement work during the Term, and (ii) the Extraordinary Maintenance and Repair Reserve serve as the major maintenance reserve required by the Collateral Agent, and not as an additional reserve. In the event any Project Financing Agreements impose more stringent requirements on the Operator regarding reserves, security and funding for performance of such work, then the Operator shall satisfy the more stringent requirements. So long as the Project Financing Agreements meet and are consistent with these minimum requirements, the Operator's compliance with the Project Financing Agreement requirements, terms, conditions and provisions regarding reserves, security and funding for performance of such work shall constitute compliance with this **Section 8.07**.

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FOR VALUE RECEIVED, the undersigned, Transurban Collateral Security Pty Ltd (ABN 26 097 586 797) in its capacity as trustee (the "Trustee") of the Transurban Finance Trust – City Link ("TFT"), hereby unconditionally promises to pay, from time to time, upon demand and to the order of TRANSURBAN (895) US HOLDINGS LLC, a Delaware limited liability company (the "Lender"), in lawful money of the United States of America and in immediately available funds, the aggregate unpaid principal sum of FIFTY-FIVE MILLION DOLLARS (\$55,000,000) (the "Demand Loan") or such lesser portion thereof as may be from time to time demanded by the Lender; provided, that the full unpaid balance hereof shall become due and payable on the Maturity Date.

Interest. TFT promises to pay interest on the outstanding unpaid principal amount hereof from the date hereof until repayment of the unpaid balance hereof in full at a rate equal to 6.0% per annum; provided, however, that if TFT defaults in the repayment of any principal hereof, TFT promises to pay, on demand, interest at the rate of 8.0% per annum on any such unpaid amounts from the date such payment is due to the date of actual payment. Interest shall be payable on each Interest Payment Date in arrears.

Special Mandatory Prepayment. On the TIFIA Closing Date, TFT shall repay a portion of the Demand Loan (together with interest accrued thereon to such date) (the "Special Mandatory Prepayment") such that, following such prepayment, the principal amount of the Demand Loan then outstanding is equal to Thirty Million Dollars (\$30,000,000).

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Demand Loan Maturity Date. The aggregate principal outstanding amount of this Demand Note shall be due and payable on the later to occur of (i) June [30], 2016 or, if such day is not a Business Day, upon the immediately preceding Business Day, or (ii) if later, the date on which the Lender and the Administrative Agent have agreed upon the Loan Life Cover Ratio as of the date that is the tenth anniversary of the Signing Date (the "Demand Loan Maturity Date"); provided, that if the Loan Life Cover Ratio is equal to or less than 1.00 to 1 as of such date, then the Demand Loan Maturity Date shall be extended until such date as the Loan Life Cover Ratio has been greater than 1.00 to 1 as of two consecutive Calculation Dates occurring thereafter.

Page 1

FOR VALUE RECEIVED, the undersigned, TRANSURBAN (895) US HOLDINGS LLC, a Delaware limited liability company (the "Borrower"), hereby unconditionally promises to pay, from time to time, upon demand and to the order of TRANSURBAN (895), a Delaware general partnership (the "Lender"), in lawful money of the United States of America and in immediately available funds, the aggregate unpaid principal sum of SEVENTY-SEVEN MILLION DOLLARS (\$77,000,000) (the "Affiliate Subordinated Loan") as provided below.

1. Interest.

(a) The Borrower promises to pay interest on the outstanding unpaid principal amount hereof from the date hereof until repayment of the unpaid balance hereof in full at a rate equal to 10.0% per annum. Interest shall be payable on each Interest Payment Date in arrears. Interest shall be payable from the following sources:

(i) that portion of interest accrued hereunder during any period equal in amount to interest (other than default interest) accrued under the Demand Note during the same period in accordance with the terms of the Demand Note shall be payable solely from the proceeds of interest payments (other than in respect of default interest) made by TFT under the Demand Note;

(ii) the Special Mandatory Prepayment – Affiliate Loan (as hereinafter defined) shall be payable solely from the proceeds of the Special Mandatory Prepayment (as defined in the Demand Note) made by TFT under the Demand Note; and

(iii) all other payments hereunder shall be made solely from funds remitted from the Unrestricted Sub-account of the Total Debt Service Reserve Account and the Distribution Account, subject in each case to the respective conditions on such remittances set forth in Sections 5.4(d) and 5.6(c) of the Collateral Agency Agreement.

Page 2

Mandatory Partial Prepayment.

(c) On the TIFIA Closing Date, the Borrower shall repay a portion of the Affiliate Subordinated Loan (the "Special Mandatory Prepayment – Affiliate Loan") such that, following such prepayment, the principal amount of the Affiliate Subordinated Loan then outstanding is equal to Thirty Million Dollars (\$30,000,000). Such payment shall be made solely out of the proceeds of the Special Mandatory Prepayment made on the same date by TFT pursuant to the Demand Note.

(d) Upon the Demand Loan Maturity Date (as defined in the Demand Note), a portion of the principal balance hereof equal in amount to the principal amount then due and payable under the Demand Note shall become due and payable (together with interest accrued thereon to such date). Such payment shall be made solely out of the proceeds of the repayment made on the same date by TFT pursuant to the Demand Note.

(e) The payment of amounts pursuant to this Section 2 shall not be made if a Default or Event of Default has occurred and is continuing at the time of payment.

Priority of Payments. Except So long as amounts are payable hereunder, each distribution from Unrestricted Sub-account of the Total Debt Service Reserve Account and the Distribution Account shall be applied in the following order of priority: (i) first, to pay interest accrued upon the Affiliate Subordinated Loan to the most recent Calculation Date; (ii) second, to pay the unpaid principal balance of the Affiliate Subordinated Loan or such lesser portion thereof that is in excess of the then unpaid principal balance of the Demand Note; and (iii) to the Borrower or at its order.

Pocahontas Parkway Acquisition:
Financial Model Review

Appendix D
Designated Sensitivities

Pocahontas Parkway Acquisition
- Financial Model Review

Appendix D
Designated Sensitivities

Scenarios 2, 3 and 5 to 12 below, as included in the Model (sheet "Sensitivities"), represent the Designated Sensitivities considered in our review. Scenario 4 below represents the base case model.

| Sensitivities | | | | | | | | | | | | |
|--|-------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Indicated above 1.00x with no TIFA | | | | | | | | | | | | |
| Scenario | Description | | | | | | | | | | | |
| 1 | Sculpting Mode | | | | | | | | | | | |
| 2 | Base Case TIFA | | | | | | | | | | | |
| 3 | LLSC TIFA | | | | | | | | | | | |
| 4 | Base Case | | | | | | | | | | | |
| 5 | Low Side Case | | | | | | | | | | | |
| 6 | BC Interest Sensitivity | | | | | | | | | | | |
| 7 | BC EMR Sensitivity | | | | | | | | | | | |
| 8 | BC O&M Sensitivity | | | | | | | | | | | |
| 9 | BC Breakeven | | | | | | | | | | | |
| 10 | LSC Breakeven | | | | | | | | | | | |
| 11 | Combine Scenario | | | | | | | | | | | |
| 12 | Halcrow 3% | | | | | | | | | | | |
| 13 | 0 | | | | | | | | | | | |
| 14 | 0 | | | | | | | | | | | |
| 15 | | | | | | | | | | | | |
| Sensitivity | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Sr. Debt Info | | | | | | | | | | | | |
| Min. DSCR (inc. Reserve) | 1.24x | 1.45x | 1.13x | 1.24x | 1.03x | 1.04x | 1.19x | 1.14x | 0.66x | 0.75x | 0.56x | 0.56x |
| Date | 31-Dec-12 | 31-Dec-12 | 31-Dec-13 | 31-Dec-12 | 31-Dec-13 | 31-Dec-13 | 31-Dec-12 | 31-Dec-12 | 31-Dec-13 | 30-Jun-14 | 31-Dec-12 | 30-Jun-13 |
| Min. DSCR (exc. Reserve) | 1.00x | 1.00x | 1.00x | 1.00x | 1.00x | 1.00x | 1.00x | 1.00x | 0.66x | 0.75x | 0.56x | 0.56x |
| Min. Sr. LLCR | | | | | | | | | | | | |
| 30 Years (Sr. LLCR 1) | 1.42x | 1.65x | 1.51x | 1.42x | 1.29x | 1.25x | 1.41x | 1.40x | 1.02x | 1.03x | 1.04x | 0.28x |
| Date | 31-Dec-08 | 31-Dec-08 | 31-Dec-08 | 31-Dec-08 | 30-Jun-10 | 30-Jun-10 | 31-Dec-08 | 31-Dec-08 | 30-Jun-12 | 30-Jun-12 | 31-Dec-10 | 31-Dec-35 |
| Min. Sr. PLCR | | | | | | | | | | | | |
| 36 Years (Sr. LLCR 2) | 1.63x | 1.79x | 1.63x | 1.63x | 1.40x | 1.33x | 1.52x | 1.51x | 1.11x | 1.11x | 1.11x | 1.05x |
| 40 Years (Sr. LLCR 3) | 1.62x | 1.92x | 1.74x | 1.63x | 1.48x | 1.38x | 1.61x | 1.61x | 1.17x | 1.17x | 1.18x | 1.12x |
| Demand Note available at Closing | | | | | | | | | | | | |
| Demand Note used before TIFA Funding | 55,000 | 65,000 | 55,000 | 55,000 | 55,000 | 55,000 | 55,000 | 55,000 | 55,000 | 55,000 | 55,000 | 55,000 |
| Demand Note used after TIFA Funding | 0 | 8,509 | 8,509 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Demand Note used after TIFA Funding | 0 | 20,839 | 27,263 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Use of Demand Note | 55,000 | 29,348 | 35,772 | 55,000 | 55,000 | 55,000 | 55,000 | 55,000 | 55,000 | 55,000 | 55,000 | 55,000 |
| Maximum Demand Note Used (% of Committed) | 100.00% | 53.36% | 65.04% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% |
| Use of TDSR for Interest Payments and EMRR funding | | | | | | | | | | | | |
| Use of TDSR for Sub-Interest | 3,490 | 0 | 0 | 3,509 | 10,195 | 9,253 | 4,928 | 6,942 | 30,245 | 30,245 | 30,179 | 30,242 |
| Total Use of TDSR | 31,510 | 35,000 | 35,000 | 31,491 | 24,805 | 25,747 | 30,071 | 28,058 | 4,755 | 4,755 | 4,821 | 4,758 |
| Debt Maturity if no Refinancing | | | | | | | | | | | | |
| First interest payment from Operating Cash | (year) | 20.9 | 18.5 | 20.0 | 20.0 | 21.5 | 21.0 | 20.0 | 20.0 | 29.5 | 29.0 | 28.5 |
| Interest Only Period | (year) | 7.0 | 4.0 | 4.5 | 7.0 | 8.0 | 8.0 | 7.0 | 7.0 | 14.0 | 12.0 | 15.0 |
| TIFA Debt Info | | | | | | | | | | | | |
| Min. DSCR (inc. Reserve) | 1.24x | 1.30x | 1.09x | 1.24x | 1.03x | 1.04x | 1.19x | 1.14x | 0.66x | 0.75x | 0.56x | 0.56x |
| Min. DSCR (exc. Reserve) | 1.00x | 1.00x | 1.00x | 1.00x | 1.00x | 1.00x | 1.00x | 1.00x | 0.66x | 0.75x | 0.56x | 0.56x |
| Min. Sr. and TIFA LLCR over ... (years) | 35 | 1.63x | 1.61x | 1.45x | 1.63x | 1.40x | 1.33x | 1.52x | 1.51x | 1.11x | 1.11x | 1.05x |
| Debt Maturity (if no refinancing of senior debt) | (year) | n/a | 35.0 | 35.0 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Capitalization Period | (year) | n/a | 5.0 | 5.0 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Interest Only Period | (year) | n/a | 20.5 | 20.5 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Equity Info | | | | | | | | | | | | |
| First Repayment of Sub Debt | (year) | 20.0 | 8.0 | 9.0 | 20.0 | 21.5 | 21.5 | 20.0 | 20.0 | 99.1 | 99.1 | 99.1 |
| First Distribution | (year) | 26.5 | 20.5 | 24.5 | 26.5 | 32.5 | 30.0 | 27.0 | 27.5 | 99.1 | 99.1 | 99.1 |

Pocahontas Parkway Acquisition:
Financial Model Review

Appendix E
Significant Comments and Responses

Appendix E

Significant Comments and Responses

[illegible]

TOTAL INVESTED PROJECT FUNDS (TIPF)

Per definition:

"Total Invested Project Funds" means

(a) all amounts paid by the Operator to the Association pursuant to the Asset Purchase Agreement or deposited by the Operator into any reserves as of the Closing Date as required by this Agreement or the Initial Project Financing Agreements (minus any amounts of cash or securities acquired by the Operator from the Association under the Asset Purchase Agreement, except to the extent deposited by the Operator into the reserves as of the Closing Date);

(b) all documented fees, costs and expenses incurred by the Operator on or after April 28, 2005 and paid by the Operator in connection with the investigation, evaluation, negotiation, and closing of the purchase under the Asset Purchase Agreement and this Agreement; and

(c) all capital contributions or debt advances made by the members of the Operator or its Affiliates after the Closing Date and Operator Debt incurred by the Operator after the Closing Date (other than (i) capital contributions, debt advances or Operator Debt incurred or used directly or indirectly to fund Distributions or (ii) any Refinancing to the extent that it does not increase the principal amount of Operator Debt then outstanding)."

The model version 5.07 (currently set at scenario 2) contains the following within TIPF:

a) and b) TIPF at closing

| | | |
|-------------------------------------|--------------------|----------------------|
| Amount paid by Operator to PPA | = \$480.2 m | |
| Amount deposited into TDSR at close | = \$ 35.0 m | |
| Amount deposited into EMRR at close | = \$ 2.5 m | |
| <u>Transaction costs</u> | <u>= \$ 24.4 m</u> | |
| <u>Total TIPF at closing</u> | <u>\$542.1 m</u> | [Out-Cflow! Row 123] |

This corresponds with the following sources of funding:

| | |
|------------------------------------|--------------------|
| Bank Loan – tranche A | = \$316.1 m |
| Bank Loan – tranche B (at closing) | = \$ 94.9 m |
| Funded Affiliated sub-note | = \$ 21.8 m |
| <u>Equity</u> | <u>= \$114.3 m</u> |
| <u>Total funding at closing</u> | <u>\$547.1 m</u> |

Other than the \$5m contingency issue above, the others appear to reconcile.

c) TIPF after closing date (note we've excluded capitalised interest on both the TIFIA loan and the ASN)

Draw downs after closing date to meet the following costs have been included in TIPF:

| | |
|-------------------------------|-------------|
| RAC (inc ROW and contingency) | = \$ 45.2 m |
| ETC improvement | = \$ 7.0 m |
| Other extraordinary costs | = \$ 1.3 m |

Pocahontas Parkway Acquisition
- Financial Model Review

Appendix E
Significant Comments and Responses

| | |
|-------------------|------------------|
| TIFIA issue costs | = \$ 1.6 m |
| Total | <u>\$ 55.1 m</u> |

The above is funded by TIFIA and tranche B (committed):

| | |
|--------------------------------------|----------------------|
| Tranche B (before replaced by TIFIA) | = \$ 3.4 m |
| TIFIA facility | = \$150.0 m |
| Less: tranche B replacement | <u>= (\$ 98.3 m)</u> |
| | <u>= \$ 51.7 m</u> |
| Total | <u>\$ 55.1 m</u> |

Issue #2 : Note that the above does not include any capitalised interest on TIFIA per the treatment in the model (we have eliminated for the purposes of our analysis). Capitalised interest on Tranche B has already been excluded per the model.

- a) *Please confirm your view on whether capitalised interest should be included or excluded from the TIPF calculation?*
- b) *Please can you confirm whether the treatment of capitalised interest should be consistent with all tranches of debt (eg Tranche A & B versus Affiliated Sub-Note which are currently treated differently – note we recognize that currently there is no capitalised interest on A & B)? (YM) to (a) and (b): As to any capitalized interest on Tranche A and B and on TIFIA, they should be included. As to accrued interests on the ASN, the model now assumes this is not included but we will get a definitive answer today.*

Pocahontas Parkway Acquisition:
Financial Model Review

Appendix F
Key Base Case Model Outputs

Appendix F

Key Base Case Model Outputs

Summary

Scenario

Base Case

90%

Sources and Uses of Funds

| Sources | \$'000 | % Total Uses | \$'000 | % Total |
|--|------------|--------------|------------|---------|
| Bank Loans | | | | |
| Trench A | 305,700 | 50.7% | 477,370 | 79.2% |
| Trench B | | | 7,000 | 1.2% |
| Funded at Closing | 93,880 | 15.6% | 397 | 0.1% |
| Committed | 8,350 | 1.4% | 1,350 | 0.2% |
| Total Trench B | 102,230 | 17.0% | 498,717 | 80.5% |
| Total Bank Loans | 407,930 | 67.7% | | |
| Bonds | | | | |
| CB | 0 | 0.0% | 2,486 | 0.4% |
| CAB | 0 | 0.0% | 0 | 0.0% |
| Total Debt Service Reserve | 0 | 0.0% | 35,000 | 5.8% |
| Total Debt Service Reserve | 0 | 0.0% | 37,486 | 6.2% |
| TFIA Loan | | | | |
| Funded Amount | 0 | 0.0% | 19,078 | 3.2% |
| Capitalized Amount | 0 | 0.0% | 4,644 | 0.8% |
| Total TFIA Loan | 0 | 0.0% | 500 | 0.1% |
| Notes | | | | |
| Demand Note | 21,913 | 3.6% | 24,272 | 4.0% |
| Total Sub. Debt | 55,000 | 9.2% | | |
| Equity | | | | |
| Total Equity | 118,000 | 19.5% | | |
| Total Sources | 609,873.24 | 100.0% | 609,873.24 | 100.0% |
| Uses of Funds | | | | |
| Acquisition and Other Costs | | | | |
| Bonds Prepayments and other PPA Liabilities | | | | |
| ETC Improvement | | | | |
| Insurance Premium | | | | |
| Extraordinary expenses | | | | |
| Total Acq. and Other Costs | | | | |
| Reserves Fundings (at Financial Close) | | | | |
| Extraordinary Maintenance and Repair Reserve (EMRR) | | | | |
| Debt Service Reserve | | | | |
| Total Debt Service Reserve | | | | |
| Total Reserve Funding | | | | |
| Unfunded Fees | | | | |
| Development Fees (including Insurance Premium) | | | | |
| Upfront Arranging & Underwriting Fee | | | | |
| Contingency | | | | |
| Total Upfront Fees | | | | |
| Uses of TFIA Loan | | | | |
| Replacement of Trench B | | | | |
| PAC Cost (incl. ROW & Contingency) | | | | |
| TFIA Funding Closing Fee | | | | |
| TFIA Interest Capitalized | | | | |
| Total Uses of TFIA Loan | | | | |
| Uses of Demand Note | | | | |
| Payment of Cash Interest | | | | |
| Payment of Trench A Interest | | | | |
| Funding of the EMRR | | | | |
| Amount available for drawing (not expected to be used) | | | | |
| Total Uses of SNF | | | | |
| Total Uses | | | | |

| Key Dates | Dates | Months from AD | Years from AD |
|----------------------------|-------------|----------------|---------------|
| Acquisition Date (AD) | 20-Jun-2005 | 1,188 | 99.0 |
| Concession Term | 28-Jun-2105 | n/a | n/a |
| First Bond Issues | n/a | n/a | n/a |
| Maturity | 30-Jun-2026 | 240 | 20.0 |
| Bank Term Loans | n/a | n/a | n/a |
| TFIA Loan | n/a | n/a | n/a |
| CAB | n/a | n/a | n/a |
| CB | n/a | n/a | n/a |
| Interest Returns | 9.02% | | |
| Total Return on Investment | 6.25% | | |
| Interest Returns | 9.02% | | |
| Total Return on Investment | 6.25% | | |
| Interest Returns | 9.02% | | |
| Total Return on Investment | 6.25% | | |
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| Interest Returns | 9.02% | | |
| Total Return on Investment | 6.25% | | |
| Interest Returns | | | |

Integrity

Review Base Case with EMRR

Integrity

| | |
|---|----|
| General | |
| Scenario refresh | OK |
| Balance Sheet (Semi-Annual) | OK |
| Balance Sheet (Annual) | OK |
| Total Sources and Uses | OK |
| Tranche 8 over draft (excl. accrued interest) | OK |
| Negative Cash Flow | OK |
| Residual Debt at the end of Concession | OK |
| Tax Payment Schedule update | OK |
| Senior Debt Outstanding Amount on TIFA... | OK |
| Mandatory Repayment Commencement Dat | OK |
| Total Debt Service Reserve Account | |
| Restricted Sub-account update | OK |
| Unrestricted Sub-Account test | OK |
| Distribution Account | |
| Distribution tests update | OK |
| Demand Note | |
| Test for Special Mandatory Prepayment | OK |
| Test for Maturity Date Repayment | OK |

Covenant / Default

| | | |
|---|-----------|----|
| Term of Debt Facilities | | |
| Senior Debt Term | 30-Jun-26 | OK |
| TIFA Loan | | |
| 1st Interest Payment | n/a | OK |
| Amortization Start | n/a | OK |
| Maturity | n/a | OK |
| Reserves Funding | | |
| SDSR Funding | | OK |
| SDSR used to cover shortfall? | | NO |
| EMRR Funding | | |
| Mismatch from Requested Balance | | OK |
| Insufficient Balance | | OK |
| Max shortfall in EMRR funding (USD'000) | 0 | |
| Cash/Funding Shortfall | | |
| Permit Fee/Tax/O&M | | OK |
| Improvement Works (RAC/ETC) | | OK |
| EMR Works Payment | | OK |
| Negative Cash after EMRR funding? | | OK |
| Overall Integrity | | |
| | | OK |

Other Information

| | | |
|--|---------|-----|
| Coverage ratios equal or above Base Case? | | |
| Min. Senior DSCR @ Closing | 1.2403x | YES |
| Min. Senior LLCR @ Closing | 1.4178x | YES |
| Distribution has been locked up? | | YES |
| Property Tax update | | OK |
| Flag if Balance in Distribution Account has not been used to fund cash shortfall | | NO |
| Flag if Demand Note is still outstanding after its Maturity Date | | NO |

[illegible]